BUILDING CHARACTER:
POSITIVE PSYCHOLOGY & THE AIR FORCE CORE VALUES

THESIS

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Abstract

The purpose of this study was to operationalize the Air Force Core Values using the tools of positive psychology. Although the Air Force has adopted certain tenets of positive psychology into its resilience training, little research has been done to apply its insights to Air Force ethics. To fill this gap, this study used a Qualitative Preliminary research design, in which an initial *qualitative* phase of research guided the data collection and analysis in a *quantitative* phase.

The first objective was to determine the relationship of the Core Values to the VIA Classification of Character Strengths. Phase 1 used lexical semantics techniques to identify a strong relationship between four Air Force virtues and VIA character strengths, as well as five weaker relationships. This mapping makes it possible to use the VIA Inventory of Strengths to see how well the Air Force imparts its Core Values to Airmen.

The second objective was to demonstrate how the VIA Inventory might be used in an Air Force environment. Phase 2 administered the VIA Inventory to Active Duty Airmen at the Air Force Institute of Technology, Wright-Patterson AFB, Ohio and analyzed the results using standard statistical techniques. This phase also demonstrated the kind of questions Air University can ask using the VIA Inventory.

Additional implications for future research include: future revisions to *The Little Blue Book* (2015), a more coordinated approach to ethics and resilience training, and a more holistic, organizational behavior approach to ethical culture.

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Jon Burnett

Table of Contents

List of Figures

List of Tables

BUILDING CHARACTER:

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I. Introduction

General Issues

Groups both within the Department of Defense (DoD) and without place increasing pressure on the Air Force to develop a more intentional, overarching approach to ethics, including revamped values-ethics programs in Air Force educational institutions. "Values-ethics" and "values-ethics programs" refer to organizational efforts to "build on compliance" by incorporating "guiding principles … to help foster an ethical culture and inform decision-making where rules are not clear" (GAO, 2015:6). In September 2015, the United States Government Accountability Office released a report to Congress highlighting the need for systematic changes in the ethics programs offered throughout the Department of Defense. That same month, the Office of the Senior Advisor to the Secretary of Defense for Military Professionalism (hereafter referred to as SAMP) released a report on DoD's initiatives. Although both documents noted improvements over the last few years, they also highlighted areas requiring additional development to comply with existing federal laws and regulations. As Price (2006:1-2) summarized a decade ago: "The nature of the problem may not be catastrophic, but it is pervasive; it may not have been intentional, but it is being institutionalized."

There is broad agreement that the values-ethics requirements incorporated into Professional Military Education (PME) courses are a good starting point for such reforms (GAO, 2015; SAMP, 2015). Most recently, in a 2015 Air War College report, then-

Lieutenant Colonel Daniel Stanfield identified five key components of effective ethics programs in Air Force Officer PME (Stanfield, 2015). He concluded that, "Air Force Officer PME … lacks efficacy in (a) convincing students of their risk for unethical behavior and (b) achieving unity of effort in ethics education throughout the PME continuum" (Stanfield, 2015:2). As part of his broader recommendations, he also suggested that an Airman's moral development be objectively measured in order to determine the effect of education on moral development (Stanfield, 2015:21). As he explains, "Just as wise doctors do not simply accept their patients' opinions that they are healed but order additional tests for confirmation, AU [Air University] could assess changes in students' moral reasoning abilities" (Stanfield, 2015:19). As Price (2006:6-7) again notes, "the complete void of moral assessment data within the services makes it impossible to provide the type of objective assessment that one would apply to readiness or even physical fitness. … In fact, the sheer absence of the assessment data is, in itself, evidence of moral neglect" (see GAO, 2015:31).

At the heart of these problems is the inherent difficulty in framing—both theoretically and practically—just how effective ethics programs really are, or even what they should be doing. Where are the problem areas, and how does the focus its efforts on them? Could psychometric testing be part of the solution? As one Air University official noted, "The questions we are currently asking are, 'What do we want to measure?' and 'How are we going to measure it?'" (Dr. R.J. Farrell, personal communication, July 6, 2016). While there seems to be no question that the services have a vested interest in ensuring the ethical behavior of their members, people tend to be skeptical of efforts to prescribe (much less *evaluate*) the ethics of another. As Robinson (2007:34) warned, the

primarily reactive and patchwork nature of the DoD's past efforts encourages a view of ethics "as something one resorts to only after a scandal, as a form of cover-up" (see Price, 2006:107). For this reason, Airmen question whether the Air Force wants them to behave ethically *because it is the right thing to do*, or because it is in the service's own best interests. And if the latter, what happens when behaving ethically is no longer perceived as in those best interests—as when orders push the limits on what is safe, legal, or moral (Robinson, 2007:30)?

A tentative solution to these questions lies in the classical notion of character reflected in the Air Force Core Values of **Integrity First**, **Service Before Self**, and **Excellence In All We Do**. The Air Force Core Values belong to a tradition of ethical thought that stretches back 2,400 years, and includes such diverse thinkers as Aristotle, Augustine, Avicenna, and Aquinas. Despite the two millennia that separate us from ancient Athens, positive psychology has also discovered the tradition, drawing on its insights to develop a "new science of character" (Peterson & Seligman, 2004:9). Both the Air Force and positive psychology thus arrived independently at the same conclusion: *Aristotle was right*. True happiness is an "activity of the soul in conformity with excellence" (1995a:1098) and this excellence is demonstrated "only in habitual action" (Peterson & Park, 2009:26). For this reason, Peterson and his colleagues developed two tools for use by practitioners: the VIA Classification of Character Strengths and the VIA Inventory of Strengths (Peterson & Seligman, 2004; Peterson & Park, 2009). "VIA" was originally used as an acronym for "Values in Action," but the term is now used as a proper noun, to refer to the VIA Classification and the VIA Inventory, as well as the VIA Institute on Character. As Peterson and Seligman (2004:3) summarize:

> By providing ways of talking about character strengths and measuring them across the life span, this classification will start to make possible a new science of human strengths that goes beyond armchair philosophy and political rhetoric. We believe that good character can be cultivated, but to do so, we need conceptual and empirical tools to craft and evaluate interventions.

Although the Air Force has adopted certain tenets and tools of positive psychology into its resilience training, little research has been done to apply the lessons of positive psychology to address the central questions facing Air Force ethics.

Purpose Statement & Research Objectives

To fill this gap, this study seeks to operationalize the Air Force Core Values using the tools of positive psychology. To do this required meeting two complementary research objectives:

1. Determine the relationship of the Air Force Core Values to the VIA Classification of Character Strengths, and to consider implications the implications of this relationship.
2. Demonstrate how the VIA Inventory of Strengths might be used in an Air Force environment.

These objectives led to the selection of a qualitative preliminary research design.

Research Design

A qualitative preliminary design performs an initial, *qualitative* phase of research, which then guides a second, *quantitative* phase of data collection and analysis. Morse elucidated the design in a 1991 article, prescribing it for situations in which "a single research method is inadequate" (120). In such cases, she recommended the use of *sequential triangulation* to perform related but independent phases of research that, when combined, "fit like pieces of a puzzle" (Morse, 1991:121). The goal of such a study, then, is not theoretical *convergence* (involving the development of new theory) or even

confirmation (using one approach to validate the other), but instead *complementarity* (using both methods side-by-side toward a single goal). As Morgan (1998:366) notes, "The core of this approach is an effort to integrate the complementary strengths of different methods through a division of labor. This amounts to using a qualitative and a quantitative method for different but well-coordinated purposes within the same overall project." This study is therefore primarily *quantitative* (in that it uses standard survey methodology and statistical analysis), but is necessarily preceded by a *qualitative* portion (which explains how these quantitative results should be interpreted in a new context).

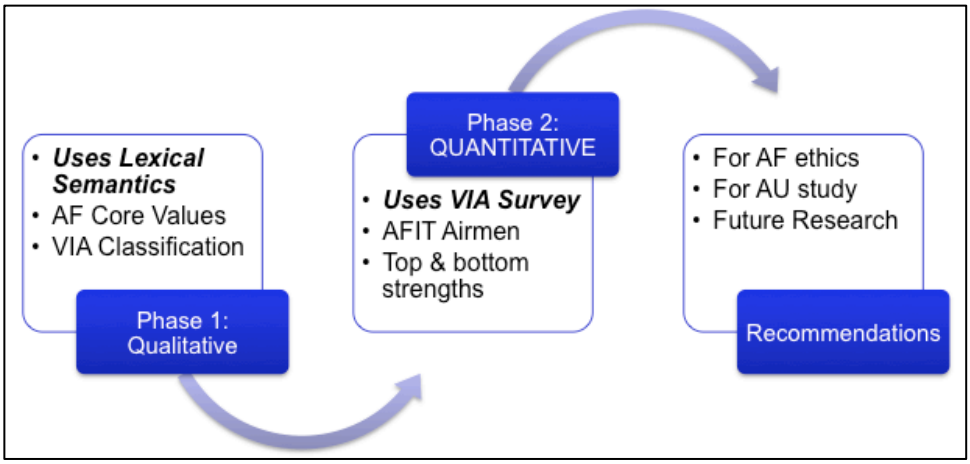


Figure 1, A Qualitative Preliminary Research Design

The qualitative phase (Phase 1) answers the first research objective to demonstrate the relationship of the Air Force Core Values to the VIA Classification of Character Strengths (Peterson & Seligman, 2004; Peterson & Park, 2009). The methodology used here is drawn from that used to develop the VIA Classification, with additional insights from the field of lexical semantics.

This is then followed by a quantitative phase (Phase 2) which demonstrates how the VIA Inventory of Strengths might be used in an Air Force environment. The VIA

Inventory was administered to Active Duty Air Force personnel at the Air Force Institute of Technology (AFIT), Wright-Patterson Air Force Base, Ohio in order to explore the following questions:

1. What are the character strengths of the average AFIT Airman?
2. How do the character strengths of the average AFIT Airman align with the Air Force Core Values?
3. How do the character strengths of the average AFIT Airman compare (a) to those of the average cadet at the US Military Academy and (b) to those of the average American (as determined by Matthews, Eid, Kelly, Bailey & Peterson, 2006)?
4. Is there any relationship between (a) age, rank, PME completion, or Air Force Specialty and (b) high scores for particular character strengths?

Implications

There are several practical implications of this study. First, the mapping of the Air Force Core Values to the VIA Classification of Character Strengths makes it possible to use the VIA Inventory of Strengths to provide a good approximation of how well the Air Force instills its Core Values into its Airmen. Secondly, Phase 2 identifies several variables of interest for future longitudinal studies by AU. Furthermore, this study provides a theoretical and practical framework for the inclusion of the VIA Inventory in Air Force PME. Additional implications for future research include: future revisions to *The Little Blue Book* (2015), a more coordinated approach to ethics and resilience training, and a Social Intuitionist approach to shaping ethical behavior through environmental changes.

II. Literature Review

Overview

The purpose of this chapter is to discuss the development of both the Air Force Core Values and the VIA Classification of Character Strengths. The necessity for such a review is both practical and ontological. Simply put, to understand the validity of an ethical outlook one must understand something of its origins and development. As Haidt (2012:51-52) explains from a complementary perspective:

> Saying "Because I don't want to" is a perfectly acceptable justification for one's subjective preferences. Yet moral judgments are *not* subjective statements; they are claims that somebody did something wrong. I can't call for the community to punish you simply because I don't like what you're doing. I have to point to something outside of my own preferences….

The conclusion of this chapter is twofold: (1) the Air Force Core Values possess good internal consistency, but the descriptions of the Core Values in *The Little Blue Book* (2015) may lack external validity, and (2) the VIA Classification of Character Strengths sets a new standard for how this validity might be achieved. To explain why this is the case, each section will begin with a theoretical question, introduced by the literature, which will guide the historical account provided for the Core Values and the VIA Classification. The first section will address how organizations shape the basic assumptions of their members and how the Air Force uses the Core Values to this end. The second section will dive deeper into these questions of validity and how it is achieved by Peterson and his colleagues in the development of the VIA Classification (Peterson & Seligman, 2004; Peterson & Park, 2009). This discussion of the literature will also inform the respective methodologies used in each phase of the study.

Air Force Ethics & the Core Values

The purpose of this section is to discuss how the definitions of the Air Force Core Values in *The Little Blue Book* (2015) may lack the external validity necessary to recommend them to today's Airmen. To demonstrate this, the author will first discuss how an organization changes its ethical culture by shaping the basic assumptions of its members, an approach that resonates deeply with Aristotle's ethics. The second aspect to be addressed will be how early efforts at effecting change in the Air Force's ethical culture failed because of a lack of coherence. Next to be addressed will be how the introduction of the Core Values (1993) sought to provide greater focus to these efforts, and why it has failed to do so. Finally, recent developments in Air Force ethics will be reviewed, providing a foundation on which to build further reforms.

The Air Force articulates its Core Values as statements of principle to build an ethical culture by shaping the basic assumptions of its members. Edgar Schein first articulated this approach in his work, *Organizational Culture and Leadership* (1992/2004). Schein focuses on an organization's history (what it has done) and its choices (what it attempts to be) in order to understand culture as formed by a long-term process of surviving *external* threats and integrating *internal* differences (Erez & Gati, 2004:585). The result is a dynamic model that works through the dual processes of *socialization* and *aggregation* (see Figure 2). As Erez and Gati (2004:587) explain,

> Through top-down processes of socialisation individuals internalise the shared meaning system of the society [and organization] to which they belong, and its values are represented in the individual self. Then, through bottom-up processes of aggregation and shared values, higher-level entities of culture are formed, at the group, organisational, and national levels.

The model also highlights two difficulties in achieving such changes. First, since individuals and subgroups already hold some contrary values, socialization often finds itself working against the natural aggregation of these values. On the other hand, the higher organization itself may be part of the problem: "the ideals and the creativity of the practice [or *profession*] are always vulnerable" to the survival needs of the institution, so that the institution must equip professionals to oppose its own tyrannizing tendencies (MacIntyre, 2007:194).

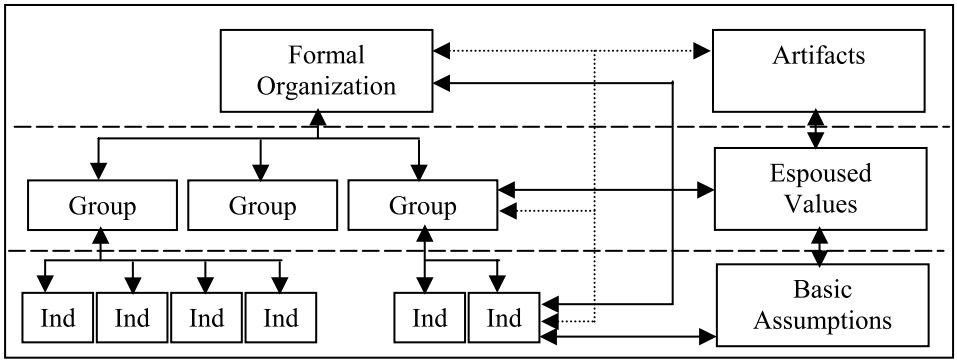


Figure 2, Interaction Between Organizational Culture & Behavior (Vroom & von Solms, 2004:197)

These insights into organizational culture are deeply rooted in the psychological and sociological underpinnings of human nature. As Aristotle taught, humans are "a political animal" (1995b:1253) that is "sociable by nature" (1995a:1097). People naturally (and often without thinking) adopt the behavior patterns of those around them. Education becomes necessary, then, both to train individuals and to provide living, breathing embodiments of the Air Force's shared values for others to observe and emulate, "for from each other they take the mould [sic] of the characteristics they approve" (Aristotle, 1995a:1172; see Haidt, 2001:10). For example, the Air Force cannot

train leaders and followers to live by separate codes of conduct, but must instead build a culture that prepares people to both lead *and* follow by imitating others:

> It has been well said that he who has never learned to obey cannot be a good commander. The excellence of the two is not the same, but the good citizen [and the good Airman!—JMB] ought to be capable of both; he should know how to govern like a freeman, and how to obey like a freeman—these are the excellences of a citizen. And, although the temperance and justice of a ruler are distinct from those of a subject, the excellence of a good man will include both. (Aristotle, 1995b:1277)

Airmen must therefore be developed throughout their career *as Airmen*, in addition to preparing them for greater levels of responsibility (Smith, 1998; Stanfield, 2015). To change its ethical culture the Air Force must shape the basic assumptions of its members, and to shape these basic assumptions, the Air Force must clearly articulate values that demonstrate greater coherence than the personal values already held by its members.

Secondly, since 1947 the Air Force has had mixed results in its attempts to shape these basic assumptions. As Dierker (1997:86-87) recounts, prior to the Air Force's introduction of its Core Values in 1993, the Air Force made at least five forays into values-related initiatives:

1. The Character Guidance Program (1948)
2. The Air Force Chaplain Program (1949)
3. The Dynamics of Moral Leadership Program (1957)
4. The Moral Leadership Program (1961)
5. Adult Values Education (AVE; a.k.a. Values Clarification) (1974)

The Core Values era itself includes at least four additional initiatives:

6. The *Six* Core Values (1993)
7. The *Three* Core Values & *The Little Blue Book* (1st ed., 1997)
8. The Airman's Creed & the Warrior Ethos (2007)
9. The Profession of Arms Center of Excellence (PACE) and *The Little Blue Book* (2nd ed., 2015)

Despite these efforts Air Force ethics has suffered from a basic incoherence almost from its beginning. As Davis and Donnini (1991:31) point out, "the Air Force system of PME *should* have been designed to imbue Air Force officers with specific, well-defined traits" (emphasis added). However, in 1963 a "report of the Air Force Educational Requirements Board Task Group noted … that Air Force PME lacked this type of forward-looking perspective" (Davis & Donnini, 1991:31). Air Force officers instead had to wait another three years for a definition of their profession to emerge, including a foreshadowing of at least two of the current Core Values:

> The professional Air Force officer … is a leader of men in both peace and war, and he is accomplished in utilizing his knowledge and skills in organizing and managing resources. He combines military bearing and self-confidence with loyalty, *integrity*, self-discipline, versatility and adaptability. His ethics and conduct are based upon the idea of *service above self*. (Air Force Manual [AFM] 53-1, *United States Air Force Officer Professional Military Education System*, 5 May 1966, 1, para. 1-2, emphasis added; quoted in Davis & Donnini, 1991:32)

But when AFM 53-1 became Air Force Regulation 53-8 only ten years later (1976), it marked several significant shifts in Air Force thinking on professionalism and PME: it deleted the description of an Air Force officer quoted above, added "aerospace power" as a pillar of Air Force PME, and moved away from the AFM's emphasis on intellectual change and motivation (Davis & Donnini, 1991:34). For decades, Air Force PME increasingly *professionalized* the application of airpower and *compartmentalized* moral judgment (Price, 2006:11). As a result, Air University's "schools became increasingly doctrinaire and specialized" and lacked a consistent "educational philosophy" (Davis & Donnini, 1991:54).

Additionally, the piecemeal introduction of the Core Values only contributed to these preexisting issues in Air Force ethics. General Merrill McPeak (Air Force Chief of

Staff, 1990-1994) introduced the first list of the Air Force Core Values in 1993. The inspiration and language of "core values" itself can be traced back to the virtue ethics tradition; a tradition which harkens back to Aristotle (384-322 BC), and includes Augustine of Hippo (AD 354-430), the Islamic scholar Avicenna (980-1037), as well as Thomas Aquinas (1225-1274). The relationship of virtue ethics to Just War theory has also appealed to military scholars through the ages. "Consequently, many military academies have adopted an approach based on Aristotelian virtue ethics," including elements of the ethics programs at both the US Military Academy and the US Air Force Academy (Robinson, 2007:30). Despite the deep roots of a Core Values approach, the concept suffered from poor implementation. During the initial development stage, there were *six* such values said to define the ethical compass of Airmen: integrity, competence, courage, tenacity, patriotism, and service (Dierker, 1997:108). Beyond the publication of these values, however, the Air Force issued no guidance on how to embody them as Airmen, much less how to shape a truly ethical culture.

For these reasons, the next Chief of Staff, General Ronald Fogleman (1994-1997), revised the Air Force Core Values into the more familiar form Airmen recognize today: **Integrity First**, **Service Before Self**, and **Excellence In All We Do**. The seminal product of the effort was a booklet entitled, *The Air Force Core Values* (more popularly known as *The Little Blue Book*, 1997). As Dierker (1997) recounts, interviews with faculty members at both the Academy and at AFIT revealed that these three Core Values were developed at the Academy before being adopted by the Air Force at-large. He also discovered implementation was better coordinated in 1997 than in 1993 and was led jointly "by a member of the Philosophy Department at the Air Force Academy and a

member from Air Education and Training Command" (Dierker, 1997:25). Despite these efforts, the Core Values still suffered from a certain degree of incoherence. For example, *The Little Blue Book* (1997) stated that, "The Core Values Strategy attempts *no explanation of the origin of the Values* except to say that all of us … must recognize their functional importance and accept them for that reason" (paragraph 3.1.1, emphasis added). *The Little Blue Book* also rejected the scholarly consensus on socialization by stating that, "Our first task is to fix organizations; individual character development is possible, but it is not a goal" (paragraph 3.1.8).

It should not be surprising, then, that the Air Force has struggled over the last 20 years to build cohesiveness through shared values across occupational subcultures (Smith, 1998; ICAF, n.d., chapter 15). For example, only a year after the publication of *The Little Blue Book* (1997), Smith (1998) surveyed 1,030 officers attending Air Force PME to determine the location and extent of presumed cultural gaps in the Air Force. What he found was that while loyalty to a particular specialty does lead individuals to different interpretations of the Air Force's culture, "The service's line-officer corps appears to provide a basic infrastructure upon which the Air Force can build cohesion"—a cohesion that relies on "Air Force leaders' active mentoring of their juniors" (Smith, 1998:48, 50).

A decade into the Core Values era, many of these issues remained relatively unchanged; as asserted by the title of Price's (2006) work: *Moral Competence ... The Missing Element in Defense Transformation*. Price notes at least five core problems that plague military ethics: politicization and careerism, toleration of bad behavior, post-modern attitudes of right and wrong, the tyranny of the bottom-line, and a timidity in

addressing these subjects in professional development. Price (2006:68) was also concerned about the ability of the Core Values to overcome these barriers: "Core values are a great tool but they were never meant to be used in isolation of a larger moral development system." And as Price points out, without this institutional commitment such efforts will always fall short: "The challenge to train and equip our warriors for ethical challenges has to go beyond the publication of hollow service values and the minimal legal ethic that is evidenced today" (Price, 2006:127). And yet much work remains to be done. As of 2014 the GAO estimates that only *five percent* of the DoD's employees receive any sort of annual ethics training (GAO, 2015:14).

Finally, as difficult as the Air Force's challenges might seem, they are neither insurmountable nor unique, and more recent efforts provide an excellent foundation for reform. As MacIntyre (2007) points out, modern philosophy and psychology have struggled with these issues for at least the last 200 years. His indictment of contemporary ethics can be justly applied to the Air Force's situation: "we continue to use many of the key expressions. But we have—very largely, if not entirely—lost our comprehension, both theoretical and practical, [of] morality" (MacIntyre, 2007:2). To its credit, the Air Force has begun to reach deeper and to work more broadly on integrating character and the Core Values back into the ideal of the professional Airman. As highlighted by SAMP (2015), the Air Force has launched five major initiatives in the past few years:

- The Profession of Arms Center of Excellence (PACE)
- The Enhanced Air Force Inspection System (AFIS)
- Curriculum overhauls at:
  - The Senior Leaders Orientation Course (for General Officers and members of the Senior Executive Service)
  - Pre-command courses for Commanders and Command Chiefs
  - Officer Training School

    - Air Force Reserve Officer Training Corps (AFROTC)
    - Enlisted PME
- The introduction of "Airman's Week" during Basic Military Training
- And a complete revision of *The Little Blue Book* (2nd ed., 2015), with the official title, *America's Air Force: A Profession of Arms*

Of these initiatives, the second edition of *The Little Blue Book* (2015) is perhaps the best starting point for a contemporary discussion of Air Force ethics. Packaged with the Core Values are the other texts Airmen hold in common: what it means to be a member of the profession of arms, the oaths of enlistment and office, the Code of Conduct of the US Armed Forces, and the Airman's Creed. Most importantly, it also contains a more developed (and classical) understanding of character as not merely what Airmen know, but who Airmen are and what Airmen do: "Values represent enduring, guiding principles for which we as individuals or organizations stand. 'Core' values are so fundamental that they define our very identity" (*The Little Blue Book*, 2015:5). And later on the same page: "The true challenge is to live them … to prove, through our actions, that we truly embody these Core Values." Thus, "Consistently practicing these virtues results in *habits of honorable thought and action*, producing an Air Force Professional" (5, emphasis added).

Taken together, if the goal is to develop good character and good Airmen, the best way to achieve this is by training the intuitions in sound habits of thought and action. As Aristotle explains, "moral excellence [*ethike*] comes about as a result of habit [*ethos*]" (1995a:1103). And this etymology holds true in Latin, as well. The English word "morals" is derived from the Latin prefix *mor-*, which means, "habit, custom" (MacIntyre, 2007:38). As MacIntyre continues, "Cicero invented [the word] 'moralis' to translate the Greek word [*ethikos*]." Exercising *character strengths* (plural) is therefore

habit-forming; and habits form one's *character* (singular). As Haidt (2001:3) points out, organizations must recognize both the *social* and the *intuitive* aspects of morality in order to help "decision makers avoid mistakes, and … educators design programs (and environments) to improve the quality of moral judgment and behavior."

This second edition of *The Little Blue Book* (2015) also simplified and generally improved the specific elaborations of the Air Force Core Values. For example, in the first edition (1997), **Integrity First** was said to cover "*several other moral traits* indispensible to national service," including courage, honesty, responsibility, accountability, justice, openness, self-respect, and humility (paragraph 1.1, emphasis in original). The second edition (2015:6) summarized these traits under the three *virtues* of honesty, courage, and accountability. Similarly, the traits/sub-traits of the other two Core Values were also reduced to three virtues each, down from seven for **Service Before Self** and eleven for **Excellence In All We Do** (see Figure 3 for the nine current Air Force virtues). Despite these improvements *The Little Blue Book* (2015), like its predecessor, makes no attempt to explain the origins of the Air Force Core Values or the virtues by which Airmen are to demonstrate these values on a day-to-day basis.

In summary, this section has demonstrated that the Air Force Core Values may lack the external validity to recommend itself to today's Airmen. First discussed was how an organization changes its culture by shaping the basic assumptions of its members. Second to be addressed was how the Air Force's early efforts at cultural change failed because of a lack of coherence. Next, the author addressed the roots of the Core Values approach, and how it often fails in implementation. And finally, recent developments in Air Force ethics were reviewed, including the foundation these efforts provide on which

to build future reforms. The history of Air Force ethics reminds us that simply publishing the Core Values and talking about them more frequently will not be enough to change the Air Force's ethical culture. To prevent the Core Values from becoming naked truisms the Air Force must provide a theoretical framework necessary to explain their intellectual depth and practical significance. While the Core Values provide a good starting point for reforming Air Force ethics, they also point to why the Air Force must continue deepening its understanding of character and character development. The field of positive psychology provides one way to do just that.

Figure 3, The Air Force Core Values & Virtues
(*The Little Blue Book*, 2015:6-8)

Positive Psychology & the Classifying of Character

The purpose of this section is to describe a more robust approach to ethics provided by the field of positive psychology. To do so, this section will first discuss the roots of the field and its essentially Aristotelian account of ethics. Second, it will describe how the field has contributed to the understanding of both ethics and psychology through its development of the VIA Classification of Character Strengths. Third, it will describe

the operationalization of the VIA Classification through the VIA Inventory of Strengths, as well as some of the lessons learned since its inception.

First, positive psychology rests on an essentially Aristotelian approach to ethics, thereby laying the foundation for a "new science of character" (Peterson & Seligman, 2004:9). As previously addressed, an ethical system must be able to support the validity of its claims in order to persuade others to adopt it. As MacIntyre (2007:23) explains, "every moral philosophy … presupposes some claim that [its] concepts are embodied or at least can be in the real social world." He continues: "To call something good … is also to make a factual statement," including the evidence upon which such a statement can stand (MacIntyre, 2007:59). To rise above claims of subjectivity, ethicists must seek out explanations that possess (a) internal consistency, (b) historically-validated objective criteria, and (c) a demonstrated ability to adapt through interactions with rival schools of thought (MacIntyre, 2007:xiii). The role of the ethicist, then, is not to create—*de novo*—reasons for behaving morally, but to *identify* and *refine* "that pre-philosophical theory already implicit in and presupposed by the best contemporary practice of the virtues" (MacIntyre, 2007:148).

A truly objective approach to ethics is therefore rooted in a deep, commonsense empiricism that opens itself up to critique and clarification from both history and psychology. Positive psychology seeks to use "the tools of scientific research to reorient psychological science and practice towards the development of a new science of human strengths" (Consentino & Castro, 2012:200). As Peterson and Seligman (2004:4) noted, "What distinguishes positive psychology from the humanistic psychology of the 1960s and 1970s and from the positive thinking movement is its reliance on empirical research

to understand people and the lives they lead." So as with Aristotle long before, ethicists cannot simply ask, "What do *I* say?" (painfully aware of individual imperfections), but instead, "What do *we* say?" across that whole vast history of inquiry into the human condition (MacIntyre, 2007:147).

Because of this, despite the 2,400 years that separate us from ancient Athens, psychology seems to be rediscovering the virtue ethics tradition, providing empirical insights by which humanity can better understand the development of character. What Peterson and his colleagues found is that Aristotle was essentially correct about both the *Why* and the *How* of ethics. In Aristotle's view, each person seeks a deep satisfaction with his or her life—often called *happiness*, *flourishing*, or *thriving* (the *Why*)—but this is not merely a positive emotion, but an "activity of the soul in conformity with excellence" (the *How*) (1995a:1098). As Peterson and Seligman (2004:4) state, "we believe that character strengths are the bedrock of the human condition and that strength-congruent activity represents an important route to the psychological good life." This convergence between ancient philosophy and empirical science allows psychology to develop methodologies and tools unavailable to the ancients in order to extend and clarify the understanding of ethics in important ways. "Said another way, scientific psychology is not in a position to prescribe the moral life but is well equipped to describe the what, how, and why of good character" (Peterson & Park, 2009:26).

Secondly, positive psychology builds on this classical approach to character by developing a common vocabulary for use among psychologists, managers, coaches, and teachers: the VIA Classification of Character Strengths (Peterson & Seligman, 2004). As Dahlsgaard and her colleagues point out, until relatively recently no such vocabulary

existed, meaning that psychology tended to focus more on psychological problems than solutions. “Psychology has long ignored human excellence, in part because we lack a crucial starting point: an empirically informed, consensual classification of human virtues” (Dahlsgaard, Peterson & Seligman, 2005:203). In 2004, Peterson and Seligman sought to rectify this with the publication of their landmark work, *Character Strengths and Virtues* (CSV). The goal was to provide the same sort of practical framework and vocabulary for positive psychology that the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) had for psychiatry (published by the American Psychiatric Association, 1994). They also learned from the DSM that for any resulting classification to be accepted as universal, it must be empirically grounded and valid across cultures. As they explained, this required two phases of study:

> The first was a literature search and review of early and influential attempts to list virtues crucial to human thriving [see Figure 4]. The second aim was empirical: Would the virtue catalogs of early thinkers converge? Would certain virtues, regardless of tradition or culture, be widely valued [see Figure 5]? (Dahlsgaard et al., 2005:204)

Positive psychology does not *begin* with a list of character strengths and explain why these should be followed and not others, but instead seeks to *identify* and *define* those strengths that are best represented in the history of human thought. As Peterson and Seligman (2004) noted, their goal was to first determine *which* virtues are present before seeking an explanation of *why* they are present. The term used to describe their effort (*classification*) is itself indicative of this purpose: “A scientific classification parses some part of the universe first by demarcating its domain and second by specifying mutually exclusive and exhaustive subcategories within that domain” (Peterson & Seligman, 2004:6). The immediate task required delineating “an aspirational classification of

strengths and virtues," which "preserves the flexibility" necessary to pave the way for deeper theory (Peterson & Seligman, 2004:7).

Figure 4, Literary Sources for the VIA Classification (see Dahlsgaard et al., 2005)

Inspiration for the VIA Classification was also drawn from similar efforts in the natural sciences, and especially in biology. As Peterson and Seligman (2004:13) relate:

> Our hierarchical classification of positive characteristics was modeled deliberately on the Linnaean classification of species, which also ranges from the concrete and specific (the individual organism) through increasingly abstract and general categories (population, subspecies, species, genus, family, order, class, phylum, kingdom, and domain).

Two levels of this classification relate to the present study:

1. *Virtues* are the broad characteristics valued by *most* moral philosophers and religious thinkers *most* of the time.
2. *Character strengths* are the *specific* psychological ingredients—processes or mechanisms—that define the virtues (see Peterson & Seligman, 2004:13-14).

As in biology, then, the classification effort began with individual "specimens" from the literature, which were carefully dissected and then compared to other specimens. To be considered a viable strength each specimen was required to meet *most* of the following criteria (summarized here from Peterson & Seligman, 2004:16-27):

1. Strengths contribute to the good life and, by extension, help one cope with adversity.
2. Each is morally valued in its own right, and at times produces desirable outcomes.
3. The display of a particular strength by a person does not diminish other people in the vicinity.
4. A true strength should not have an "opposite" that can be phrased positively.
5. Strengths manifest in the full range of an individual's behavior—thoughts, feelings, and/or actions—in a way that can be assessed (that is, a trait in the psychological sense).
6. It is distinct from other positive traits in the classification and cannot be decomposed into them.
7. It is embodied in identifiable paragons.
8. Some (though not all) will be reflected in individuals who characteristically *possess* the strength (prodigies).
9. Some (though not all) will be reflected in individuals who characteristically *lack* the strength (such as psychopaths).
10. Society provides institutions and rituals for cultivating strengths and virtues and then for sustaining their practice.

Of course, as with demarcating between two species, some categorizations were more easily achieved than others. The editors treated each trait as a natural category of personal qualities with overlapping meanings, so that "traits within the same category are not exact replicas of one another" but do possess a certain "family resemblance" (Peterson & Seligman, 2004:16). As particular traits were identified and listed from each literary source, they were gradually classified "under an obviously emerging *core virtue*" (Dahlsgaard et al., 2005:204, emphasis in original). The immediate result of these efforts was the VIA Classification of Character Strengths (Figure 5), which identified six historic human virtues further broken down into 24 character strengths. More important, was that these virtues were recognizable at all. "The primary lesson we learned from our historical exercise is that there is convergence across time, place, and intellectual tradition about certain core virtues" (Dahlsgaard et al., 2005:210). Although the presence of some virtues is stronger than others, and the ranking of the six differs from culture to

culture, the convergence identified in the study makes a strong argument for "the possibility of universality and a deep theory about moral excellence" (Dahlsgaard et al., 2005:211-212).

Figure 5, The VIA Classification of Character Strengths (Peterson & Seligman, 2004)

Finally, positive psychology extends the classical approach to character in its development of a psychometric tool to measure the character strengths identified in the CSV, known as the VIA Inventory of Strengths. Based on the VIA Classification, Peterson and Seligman developed the VIA Inventory as "the only free, scientific survey on character strengths" available online (Peterson & Seligman, 2004; Peterson & Park, 2009; www.viacharacter.org). Since its development, it has been administered to over four million people, and has served as the basis for over 250 published articles. The 120-item VIA Inventory of Strengths (VIA-120) provided online uses a 5-point Likert scale, and asks five questions per construct (character strength) in order to determine how well an individual thinks the statement describes them. Additional versions of the survey are also available for both early childhood educators (72 questions) and researchers (240

questions). As pointed out by Peterson and Park (2009:29) the use of the Internet has extended the study of character both practically and theoretically:

> In addition to traditional methods of collecting data, we also used the Internet to reach a wide range of adults. … Critical to the appeal of this method, we believe, is that upon completion of the measures, respondents are given instant feedback about their top five strengths. In addition to expediting our research, this strategy has taught us something about character: Being able to put a name to what one does well is intriguing to people and even empowering.

Several initial conclusions have resulted from these studies, two of which pertain to this stage of the present discussion. The first is that "virtually everyone has some notable strengths of character"—their "signature strengths"—which define one's individual personality (Peterson & Park, 2009:29). And secondly, it was found that in using these character strengths, people make trade-offs between strengths "in characteristic ways," a pattern that "might reveal something" about how day-to-day living constrains the way good character presents itself (Peterson & Park, 2009:31). This means that in order to live out these strengths, each should be used in combination with the others ("in just the right amount") rather than in isolation, so that (for example) one's open-mindedness does not lead to overthinking, and one's tendency toward teamwork does not lead to burnout (Polly & Britton, 2015:5, 131, 133, 177).

This section has described positive psychology as a more robust approach to ethics and character development than that which has influenced Air Force ethics to-date. To do so, the section first discussed the roots of the field and its essentially Aristotelian account of ethics—its empiricism, its pursuit of human happiness, and its emphasis on the strengths of human virtue. It then described how positive psychology has contributed

to the science of character through its development of both the VIA Classification of Character Strengths and the VIA Inventory of Strengths.

Summary

The purpose of this chapter has been to discuss the development of the Air Force Core Values and the VIA Classification of Character Strengths—both of which have deep roots in an Aristotelian approach to ethics. This chapter has also described why (1) the Air Force Core Values may lack the external validity to recommend itself to today's Airmen and (2) how the VIA Classification of Character Strengths sets new standards for how this validity might be achieved. Each section in the chapter began with a theoretical question, introduced by the literature, which then guided the historical account provided for each approach. The first section addressed how the Air Force has sought to achieve socialization of its values through the use of the Core Values. The second section dived deeper into the validity of ethics research itself and how this has been advanced by Peterson and his colleagues in the development of both the VIA Classification and the VIA Inventory (Peterson & Seligman, 2004; Peterson & Park, 2009). Phase 1 of the research design turns to the question of how these two classifications relate to one another, and whether or not this provides us a way to operationalize the Air Force Core Values using the tools of positive psychology.

III. Phase 1: A Qualitative Investigation of the Air Force Core Values and the VIA Classification of Character Strengths

Objective

As discussed in Chapter I, a qualitative preliminary research design performs an initial, *qualitative* phase of research, which then guides a second, *quantitative* phase of data collection and analysis. As Morgan (1998:366) notes, such an approach integrates "the complementary strengths of different methods through a division of labor. This amounts to using a qualitative and a quantitative method for different but well-coordinated purposes within the same overall project." The previous chapter addressed the development of the Air Force Core Values and the VIA Classification of Character Strengths. Yet, while the Air Force Core Values enjoy wide recognition among Airmen, it remains to be seen how *the definitions of the Core Values* relate to the more established validity of the VIA Classification. Phase 1 of the research design uses lexical semantic techniques to meet the first research objective:

1. Determine the relationship of the Air Force Core Values to the VIA Classification of Character Strengths, and consider the implications of this relationship.

This directs us to the overall purpose if the study by determining whether the Core Values can be operationalized using the VIA Inventory of Strengths, which will be the focus in Phase 2.

Methodology

Phase 1 uses lexical semantics to determine the relationship of the Air Force Core Values to the VIA Classification of Character Strengths. As previously addressed, the VIA Classification arose to meet the pressing need in positive psychology for a common

vocabulary by which researchers and practitioners could better understand and communicate concerning character-related phenomena. The methodology used in this study is very similar to that used for the VIA Classification, using an essentially Linnaean approach that begins with more specific terms and works upward to more abstract ones (Peterson & Seligman, 2004; Peterson & Park, 2009). This methodology is further shaped by insights from the field of lexical semantics, the theoretical science of word meaning (Geeraerts, 2002:1).

Lexical semantics approaches the science of words using two complementary, overarching questions: *What does this word mean?* And, *What name belongs to this thing?* (Geeraerts, 2002:9). The first question is a matter of *meaning* (known as semasiology), beginning with the form of a particular word in order to understand the function the word performs as part of language (which can be visualized as form → function). The second question is a matter of *naming* (known as onomasiology), first determining how a word functions and then drawing inferences on the best form the word should take (which can be visualized as function → form).

Although several approaches to semantics have been taken over the last century, it is the field's basic principles that are most pertinent to the present study. First, as Rakhilina and Reznikova (2014:3) note, it must be understood that there are almost no full synonyms in most languages. If such a situation arose, one word would eventually fall into disuse. For this reason, words with similar meanings should instead be clustered into larger word groups known as *semantic fields* (Geeraerts, 2002:2). Accompanying this shift is an increased focus on *sentences* rather than individual *words*, or what Geeraerts (2002:5) refers to as "natural language categorization." So while a more

semasiological approach might be merited in certain situations (such as etymology or philology), the question here leads to a more "pragmatic, usage-based perspective" (Geeraerts, 2002:13). This simplifies the question at hand to, *How would an Airman most naturally describe this Air Force virtue?*

Limitations

There are at least two major limitations to this approach. The first is that the present author has no academic training or professional experience in lexical semantics. Although he has an academic background in the humanities (including history, literature, philosophy, and theology), he approaches the field of lexical semantics essentially as a well-read layman, rather than an experienced linguist. Similarly, though he has twelve years of Air Force experience—as both an enlisted Emergency Manager (AFSC 3E9X1) and a Logistics Readiness Officer (AFSC 21R)—he is not a professional lexicographer. This limitation is mitigated to an extent by the way the research question has been framed.

A second limitation is concerned with the extent of this study. Rather than assembling a census of the entire population of written texts on both (a) the Air Force Core Values and (b) the VIA Classification of Character Strengths, the author has chosen a sample of only two artifacts, one for each classification: (a) *The Little Blue Book* (2nd ed., 2015) and (b) the latest description of the VIA character strengths from the VIA Institute on Character (www.viacharacter.org). Since these sources are readily available to other readers, the findings of Phase 2 are readily verifiable.

Results and Analysis

To perform the required analysis on these two texts, Phase 1 used a relatively simple, three-step process. Beginning with the second edition of *The Little Blue Book* (2015), the author identified key words and phrases used to describe each of the nine Air Force virtues. These key words and phrases were then compared to the most recent list and definitions of the VIA Classification of Character Strengths provided on the website of the VIA Institute on Character (www.viacharacter.org). Each Air Force virtue was then assigned to the closest possible equivalent on the VIA Classification. These comparisons led to six possibilities (see Geeraerts, 2002:3):

1. The terms are synonyms: The terms function as rough equivalents (e.g., "courage" and "bravery").
2. The terms are related but at **different** levels of classification: One of the terms is a specific subset of another, more abstract term. For example, the Air Force uses *honesty* to express certain aspects of **Integrity First**.
3. The terms are related and on the **same** level of classification: Both terms are specific subsets of a more abstract term. For example, the Air Force uses both *courage* and *honesty* to describe aspects of **Integrity First**.
4. The terms are antonyms: The same word is being used in opposing ways. For example, Aristotle defines "virtue" as acting *with* inclinations, while Kant defines "virtue" as acting *against* inclinations (MacIntyre, 2007:149).
5. At least one of the terms does not reflect a character trait. Cawley, Martin, and Johnson (2000) raised this possibility in a similar study, in which they asked of each potential trait: Can a form of the word be used naturally in the sentences: "I ought to be [*adjective*]" or "I ought to show [*noun*]"? (1002). Peterson and Seligman (2004:69) also drew on this insight in their development of the VIA Classification.
6. Terms in the same classification are synonyms, which prevents a unique definition and match. For example, multiple Air Force virtues might be describing the same qualities, providing little to no descriptive value.

Using this conceptual framework, the tables below map each Air Force Core Value to corresponding character strengths from the VIA Classification. The similarities between the two classifications are underlined. Four out of the nine specific Air Force

virtues found a strong similarity to a character strength in the VIA Classification. These terms are believed to be functional synonyms (Option 1) and are shown in **Black** in the tables of results.

In five cases a virtue provided in *The Little Blue Book* (2015) was not found to have a direct equivalent. Instead, the VIA Classification possessed a related term (Option 3) that seemed to be describing the same or a similar trait at the same level of classification. Virtues with these weaker relationships are identified in the tables of results in ***Red italics***.

Additionally, the weakness of these relationships suggest the further possibility that these particular Air Force virtues are not personality traits at all (Option 5) or that the virtue in question might be too closely related to another Air Force virtue (Option 6). These situations will be further discussed in the next section.

Finally, no Air Force virtues met the criteria for Options 2 or 4. Between the two classifications, there were no similarities at different levels, and there were no antonyms. The final mapping of the two classifications is shown in Table 4.

Table 1, Integrity First & The VIA Classification

The Air Force Core Values From *The Little Blue Book*, 2015:6	Related VIA Character Strengths From www.viacharacter.org
• **Honesty** ○ Honesty is the hallmark of integrity. ○ evaluate our performance against standards ○ conscientiously and accurately report findings ○ advance … through our own efforts	• **Honesty** [authenticity, integrity]: Speaking the truth but more broadly presenting oneself in a genuine way and acting in a sincere way; being without pretense; taking responsibility for one's feelings and actions
• **Courage** ○ doing the right thing despite … fear ○ take necessary … risks ○ make decisions that may be unpopular ○ admit to our mistakes	• **Bravery** [valor]: Not shrinking from threat, challenge, difficulty, or pain; speaking up for what is right even if there is opposition; acting on convictions even if unpopular; includes physical bravery but is not limited to it
• ***Accountability*** ○ responsibility with an audience ○ maintain transparency ○ seek honest and constructive feedback ○ take ownership of the outcomes of their actions and decisions ○ refrain from actions which discredit themselves or our service	• **Humility**: Letting one's accomplishments speak for themselves; not regarding oneself as more special than one is

Table 2, Service Before Self & The VIA Classification

The Air Force Core Values From *The Little Blue Book*, 2015:7	Related VIA Character Strengths From www.viacharacter.org
• ***Duty*** ○ perform what is required ○ sometimes calls for sacrifice ○ consistently choose to make necessary sacrifices	• **Self-Regulation** [self-control]: Regulating what one feels and does; being disciplined; controlling one's appetites and emotions
• **Loyalty** ○ internal commitment to … something bigger than ourselves ○ Nation first … our Air Force second, and finally … the men and women with whom we serve ○ trust, follow, and execute [leaders'] decisions ○ offer alternative solutions and innovative ideas … through the chain of command ○ helping each other act with honor	• **Teamwork** [citizenship, social responsibility, loyalty]: Working well as a member of a group or team; being loyal to the group; doing one's share
• **Respect** ○ treating others with dignity and valuing them as individuals ○ all Airmen possess fundamental worth as human beings ○ treat others with … dignity and respect ○ diversity is a great source of strength	• **Fairness**: Treating all people the same according to notions of fairness and justice; not letting personal feelings bias decisions about others; giving everyone a fair chance

Table 3, Excellence In All We Do & The VIA Classification

The Air Force Core Values From *The Little Blue Book*, 2015:8	Related VIA Character Strengths Descriptions from **www.viacharacter.org**
• ***Mission*** o ingenuity, expertise, and elbow grease o stewardship, initiative, improvement, pride … anticipate and embrace change o undeniably professional and positive o innovative ideas, strategies, and technologies	• **Creativity** [originality, ingenuity]: Thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it
• ***Discipline*** o uphold the highest personal and professional standards o life of discipline and self-control o work ethic o continuous improvement o nurturing ourselves physically, intellectually, emotionally, or spiritually	• **Perseverance** [persistence, industriousness]: Finishing what one starts; persisting in a course of action in spite of obstacles; "getting it out the door"; taking pleasure in completing tasks
• ***Teamwork*** o recognize the interdependency of every member's contributions o strive for organizational excellence o give our personal best o challenge and motivate each other	• **Leadership**: Encouraging a group of which one is a member to get things done, and at the same time maintaining good relations within the group; organizing group activities and seeing that they happen

Discussion

Mapping the Air Force Core Values to the VIA Classification of Character Strengths demonstrates a clear relationship between the two classifications, and reflects a good probability that the Core Values can be operationalized using the tools of positive psychology. Doing so also highlighted an unintended discovery: an opportunity to revise the definitions of the Core Values in future revisions of *The Little Blue Book*. First, the mapping process itself (see Table 4) shows clearly that it is possible to operationalize the Core Values using the VIA Classification. The descriptions of the three Core Values show a strong resemblance to the descriptions of specific character strengths in the VIA Classification and are believed to be functional synonyms. This resemblance was especially true between four pairs of Air Force virtues and VIA character strengths:

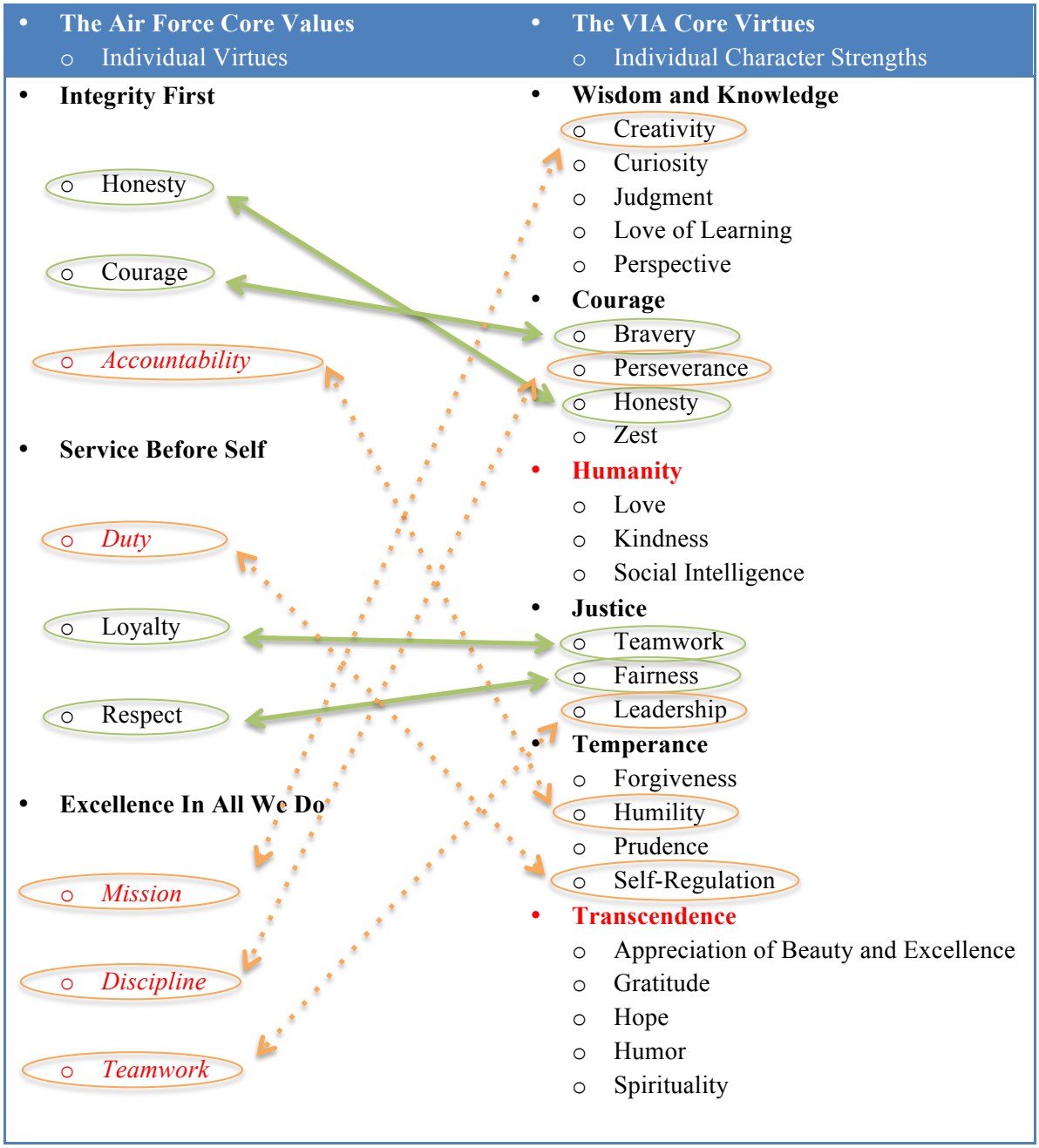
Honesty → Honesty, Courage → Bravery, Loyalty → Teamwork, and Respect → Fairness.

For the five remaining Air Force virtues, no direct equivalent was found. Instead, the VIA Classification possessed a related term that seemed to be describing the same or a similar trait at the same level of classification. These five pairs were Accountability → Humility, Duty → Self-Regulation, Mission → Creativity, Discipline → Perseverance, and Teamwork → Leadership.

Three of these weak relationships arise from Air Force virtues—specifically, Accountability, Duty, and Mission—which seem to fail Cawley's heuristic for a virtue: Can the word be used naturally in the sentences: "I ought to be [*adjective*]" or "I ought to show [*noun*]" (Cawley et al., 2000:1002)? This does not mean that Accountability, Duty, and Mission are not *values* Airmen hold dear, or that they should not be part of an Airman's vocabulary, but it does mean that they are probably not *virtues* (which describe individual thoughts, feelings, and actions). It might be better to say that a *humble* person holds himself accountable, a *disciplined* person does her duty, or that a *creative* person looks for new and better ways to accomplish the mission.

The remaining weak relationships arise from the fact that some Air Force virtues are synonyms. *Discipline* (a virtue of **Excellence In All We Do**) is listed by the VIA Classification as a synonym for Self-Regulation, which is more closely related to the Air Force virtue referred to as *"Duty."* Another Air Force virtue, *Teamwork* (also for **Excellence In All We Do**) is a character strength in the VIA Classification, but the VIA strength by that name has a stronger relationship to the Air Force virtue of *Loyalty* (listed under **Service Before Self**).

Table 4, Mapping of the Core Values to the VIA Classification



Key to Table 4

- **Green arrows**: terms are being used as functional synonyms.
- **Orange dotted arrows**: Certain VIA character strengths are describing the same traits as a particular Air Force virtue, but under names that differ from those used by the Air Force.
- *Red italicized*: Air Force virtues which demonstrate a weak relationship to the VIA Classification. This may indicate the need for revision to more precisely name the character traits in question.
- **Red bold**: Certain VIA virtues that are not reflected in the Air Force Core Values. The character strengths listed under these virtues should also be considered for future revision.

Finally, it should also be noted that the current definitions of the Air Force Core Values do not seem to relate in any way to the VIA Classification's virtues of **Humanity** (including the strengths of Love, Kindness, and Social Intelligence) or **Transcendence** (Appreciation of Beauty and Excellence, Gratitude, Hope, Humor, or Spirituality). Although twelve years of service teach the author that these virtues are alive and well among Airmen, their absence among the Core Values is reminiscent of a charge Aristotle laid against Sparta: "the whole constitution has regard to one part of excellence only—the excellence of the soldier, which gives victory in war. So long as they were at war, therefore, their power was preserved, but … of the arts of peace they knew nothing" (1995b:1271; see 1995a:1177). As Olsthoorn (2013:366-367) points out, while "courage, discipline, loyalty and obedience" remain essential to military ethics, the increasing prominence of military operations other than war demands that the Air Force consider whether they are sufficient for today's warfighters (see Robinson, 2007:31-32). One way of shifting in this direction might be to replace the section on "Respect" on page 4 of *The Little Blue Book* (which is redundant with the paragraph on p. 7) with a discussion on the meaning of "Character" or "Habituation."

Taken together, the mapping of the Core Values to the VIA Classification leads us to one conclusion and one possible implication. The first research objective can be answered by stating that there is a clear relationship between the Air Force Core Values and the VIA Classification, particularly with the character strengths of Honesty, Bravery, Humility, and Self-Regulation, as well as five weaker relationships with the strengths of Teamwork, Fairness, Creativity, Perseverance, and Leadership (see Figure 6). These character strengths will receive additional attention in Phase 2 of the study. Secondly,

future editions of *The Little Blue Book* should consider the following revisions to the Air Force virtues to provide greater clarity and coherence:

1. Replace the section on "Respect" (4) with one on "Character" or "Habits"
2. Under **Integrity First** replace *Accountability* with *Humility* (which actually restores a trait from *The Little Blue Book*, 1st ed., 1997)
3. Under **Service Before Self** replace *Duty* with *Discipline*
4. Under **Excellence In All We Do** replace *Mission*, *Discipline*, and *Teamwork* with *Creativity*, *Perseverance*, and *Leadership*

Summary

Using lexical semantics, Phase 1 determined a strong relationship between the Air Force Core Values and the VIA Classification of Character Strengths. The specific relationships between the Core Values and these nine VIA character strengths will inform the data collection and analysis in Phase 2 of the study using the VIA Inventory of Strengths. These results also have implications for future revisions to the Air Force virtues in order to provide greater clarity and coherence.

Figure 6, Air Force Core Values with Related VIA Character Strengths

IV. Phase 2: A Quantitative Investigation of the Character Strengths of AFIT Airmen Using the VIA Inventory of Strengths

Objective

As addressed in Chapter I, Air University (AU) is currently considering several psychometric tests as part of a larger effort to reform its values-ethics programs in Air Force Professional Military Education (PME). Data is needed not only to determine the effect of socialization on the basic assumptions of Airmen (addressed in Chapter II), but may also be useful in determining the effectiveness of Air Force ethics programs. As Price (2006:6-7) noted, "the complete void of moral assessment data within the services makes it impossible to provide the type of objective assessment that one would apply to readiness or even physical fitness." For this reason, Chapter II addressed how both the VIA Classification of Character Strengths and the VIA Inventory of Strengths might fill this void. And Chapter III demonstrated how the nine virtues which describe the Air Force Core Values relate to certain character strengths in the VIA Classification. This chapter moves to the quantitative portion of the research design in order to address the second research objective:

2. Demonstrate how the VIA Inventory of Strengths might be used in an Air Force environment.

From January 17 to February 7, 2017 the VIA Inventory of Strengths (Peterson & Seligman, 2004; Peterson & Park, 2009) was used to sample Active Duty Air Force personnel at the Air Force Institute of Technology (AFIT) at Wright-Patterson AFB, Ohio. The aggregated survey results were then analyzed to explore the kind of questions the VIA Inventory can be used to answer in an Air Force environment, specifically:

1. **What are the character strengths of the average AFIT Airman?** Which strengths do they most relate to? Which strengths do they tend to underuse?
2. **How do the character strengths of the average AFIT Airman align with the Air Force Core Values?** How do these Airmen rank the VIA character strengths identified in Phase 1? Are they included in the sample's "signature strengths" (their strongest)? Does the sample have signature strengths not identified in Phase1? What might this say about the degree to which the Air Force is successfully socializing the Core Values?
3. **How do the character strengths of the average AFIT Airman compare (a) to those of the average cadet at the US Military Academy and (b) to those of the average American (as determined by Matthews et al., 2006)?** Since character can present itself in different ways in different settings, does there appear to be any strength(s) associated with being in the military or being in an academic environment, etc.?
4. **Is there any relationship between (a) age, rank, PME completion, or Air Force Specialty and (b) high scores for particular character strengths?** Most people assume that one's identification with the Core Values would increase over time, especially due to rank and PME completion—but does it?

In practical terms, this also extends the previous research conducted by Matthews et al., (2006), and provides a baseline for future Air University longitudinal studies.

Methodology

Phase 2 uses standard survey methodology and statistical analysis to demonstrate how the VIA Inventory might be used in an Air Force environment. As Peterson and Seligman (2004:3) summarize, the VIA Inventory was developed as part of a suite of "conceptual and empirical tools to craft and evaluate interventions," and is currently "the only free, scientific survey on character strengths" available online (see Peterson & Park, 2009; www.viacharacter.org). Since its development, the VIA Inventory has been administered to over four million people, and has served as the basis for over 250 published articles. The 120-item VIA Inventory of Strengths (VIA-IS; VIA-120) used in this study uses a 5-point Likert scale, and asks five questions per construct (character strength) in order to determine how well an individual thinks the statement describes

them. The survey was voluntary and completely confidential, and took approximately 15 minutes to complete.

The VIA Inventory has well-established internal and external validity, as determined most recently by McGrath (2012) and Diener et al. (2010). In his validation study on the VIA Inventory McGrath (2012) found that the VIA-120 has an overall internal consistency of 0.79, with the lowest alpha for Leadership (0.68) and the highest for Spirituality (0.91). Additionally, he identified four character strengths that merit further attention to improve their construct validity, including Leadership, Zest, Hope, and Gratitude. His second-order factor analysis also led to a recommendation for a five-virtue organization of the strengths, rather than the six present in the VIA Classification. Additionally, Diener and his colleagues (2010) tested the external validity of the VIA-120 against three existing psychometric instruments: the original 240-item VIA Inventory of Strengths (with an alpha of 0.83), the Activities Questions instrument (alpha of 0.50), and the Flourishing Scale (with an alpha of 0.39). For these reasons, this study will use the VIA-120 as the best, widely available approximation for each VIA character strength.

The methodology used in Phase 2 of the study is also informed by three previous studies applying the VIA Inventory to military populations. The first was a comparison of the character strengths of Norwegian military cadets, cadets at the US Military Academy, and a United States civilian pool (Matthews et al., 2006). The second was a study on the character strengths of Argentinean soldiers and their relationship to success on various academic and military tasks (Consentino & Castro, 2012). A third study also found that military leaders who possessed the strength of Humor earned their followers' trust, while

it was followers' Perspective that best predicted their leaders' trust in them (Sweeney, Hannah, Park, Peterson, Matthews & Brazil, 2009).

Access to Site & Approval Process

The approval process for Phase 2 required coordination with four organizations: the VIA Institute on Character, the office of the AFIT Commandant, the AU Survey Control Office, and the AFIT Institutional Review Board (IRB). The first step involved contacting the VIA Institute on Character with a request to conduct research using the online, VIA-120. This was granted on October 13, 2016. The VIA Institute will also receive a copy of this study once it has been released. The second step involved a meeting with the AFIT Commandant to express the intent of the study and gain access to his site and personnel, which was graciously approved the following week on November 29, 2016. Next, in accordance with Air Force Instruction 38-501, *Air Force Survey Program* (AU Supplement, Feb 20, 2014), the author contacted the Air University Survey Control Office to gain authorization to survey the AU faculty, staff, and students stationed at AFIT. This was granted December 2, 2016. Finally, the AFIT IRB approved the exemption for request from human experimentation requirements on January 3, 2017.

Data Collection

In order to gather all relevant demographic information needed to answer the investigative questions, two surveys were used: (1) one hosted by Survey Monkey® to gain respondents' consent to participate and some basic information concerning their military career (see Table 5) and (2) the 120-item VIA Inventory of Strengths hosted online by the VIA Institute on Character. Participants were not asked to give their name,

but instead chose their own personal identifier to link the two parts of the survey. After gathering the information in Table 5, Survey Monkey® then pointed the participant to the VIA Institute's website. Before taking the VIA Inventory, participants were also given the opportunity to review and agree to the VIA Institute's privacy policy. Participants were not compensated for participating in the survey, and at the end of the survey were provided a personal character profile listing all 24 VIA character strengths in rank order.

Table 5, Demographic Questions from Survey Monkey

1. My role at AFIT is (please select one): MS Student PhD Student Faculty Member Staff Member **2. My current rank is (dropdown menu): _____** **3. The first number in my Primary Air Force Specialty Code is (dropdown menu): _____** **I have successfully completed the following PME courses (please select all that apply):** ALS NCOA SNCOA SOS ACSC AWC **5. Enter a Participant ID of your choice. Write this down on a separate piece of paper along with the Research Code, T2216. You will be asked for these codes at the conclusion of the VIA Inventory. _____**

The population of interest for the survey included 714 Active Duty Air Force members physically assigned to AFIT. The survey window was January 17, 2017 through February 7, 2017. At the beginning of the survey window potential participants received an emailed invitation to participate in the study. Based on feedback received from the first wave of respondents, an additional follow-up email was sent on January 24, including more specific instructions for inputting the research code and their participant ID at the conclusion of the VIA Inventory. At the end of the survey window, all

participant data was pulled from both websites, stored in a password-protected database, and matched line-for-line. This matching resulted in 60 complete responses, including the demographic information provided on Survey Monkey®, as well as the age, gender, and individual scores for each character strength from the VIA Institute. The overall response rate for the survey was 8.4 percent of AFIT Airmen. Specific participant demographics include the following (with comparisons to the population, when available):

- **Age**
  - Population (μ): 31.26 [19.55, 52.1]
  - Sample (x): 30.82 [22.7, 44.2]
- **Gender**
  - Females: 12
  - Males: 48
- **AFIT Status**
  - MS Students: 41
  - PhD Students: 8
  - Faculty: 10
  - Staff: 2
- **Rank**
  - Enlisted: 2 of 90 (2.2%)
  - Company Grade Officers (CGOs): 49 of 509 (9.6%)
  - Field Grade Officers (FGOs): 9 of 154 (5.8%)
- **Operational Areas** (first number in AFSC)
  - Category 1 (Operations): 5
  - Category 2 (Logistics): 20
  - Category 3 (Support): 4
  - Category 6 (Acquisitions, etc.): 30
- **PME Completion** (enlisted PME numbers include prior-enlisted officers who successfully completed various enlisted PME courses)
  - Airman Leadership School (ALS): 9
  - Noncommissioned Officer Academy (NCOA): 6
  - Squadron Officer School (SOS): 27
  - Air Command and Staff College (ACSC): 4
  - No PME: 27

These response rates point us to the quantitative limitations of the study.

Limitations

The quantitative results of this study reflect *only* the current sample of AFIT students, staff, and faculty. Future longitudinal studies are needed to determine the character strengths of *AFIT* Airmen as a population, as would any study claiming to describe the character strengths of *American* Airmen in general. This aspect of the study is further limited in scope in order to reduce variance in the sample statistics and to isolate certain factors in the analysis, including the first three participant conditions: (1) Active Duty military status, (2) in the United States Air Force, and (3) assigned to AFIT. A fourth condition, locality (that is, being physically located at Wright-Patterson AFB) was introduced to obtain a more timely survey control approval, limiting the results and analysis to on-site students, staff, and faculty, rather than AFIT personnel employed away from the main campus.

Results and Analysis

The data analysis for Phase 2 follows closely the methods recommended by McClave, Benson, and Sincich (2014) and involved the use of two software platforms: JMP® Pro (version 12.0.1) and Microsoft Excel®. This section will discuss the use of these platforms, as well as the techniques used in order to answer the four investigative questions. The analysis below also closely adhered to the VIA Institute's guidelines for the use and interpretation of the VIA Inventory. These are summarized as follows:

1. The survey can be used to (a) gain insight into groups of people (aggregated data) and/or (b) to discuss the lives of individuals (such as coaching).
2. The survey should not be used for personnel selection or for placement decisions.

3. The survey should not be incentivized or used prescriptively. Since the measures are "thoroughly transparent, they can be faked if there is a payoff for given results."
4. Survey results are not more accurate than the actual traits and habits that the scales attempt to measure (they are merely a starting point for discussion).
5. Ties between two or more strengths should be broken according to the perception of the individual, teacher, or researcher.
6. The built-in feedback provided at the end of the survey is based on an individual's own results, and is not based on a comparison to other people.
7. Character strengths are dimensions and not categories. Feedback should therefore focus on strengthening implicit strengths. (Peterson & Park, 2009; Peterson & Seligman, 2004; www.viacharacter.org)

Phase 2 used JMP® (or "Jump") first to test the assumption of normality on each of the 24 means for the VIA character strengths. Using the Shapiro-Wilk test for normality with a significance of $p < .05$, all 24 means either *failed to reject* the hypothesis for normality or had "soft fails" based on otherwise non-influential data points (see Appendix B for complete results). This phase also used JMP® to perform two Tukey tests for honest differences between sample means.

The first Tukey test was performed against Wave 1 and Wave 2 responses to check for nonresponse bias. Wave analysis is one technique used to determine whether a sample is truly representative of the population from which it was taken. If two or more waves in a sample show considerable differences (a nonresponse bias), it is likely that the sampling should have continued until the sample became representative. When the responses received before the follow-up email (17-23 Jan) were compared to the responses received after the follow-up email (24 Jan – 7 Feb), no statistically significant differences were found (see Table 6). This means that despite the small sample size, the consistency within the sample is a good indication that any factors determined to be

significant in the analysis should serve as *variables of interest for future longitudinal studies* using the VIA Inventory with an Air Force population.

Table 6, Wave Analysis (Before & After Follow-Up E-mail)

	Wave 1 (n = 37)		Wave 2 (n = 23)		Difference
Strength	***M***	***SD***	***M***	***SD***	***Tukey (p < .05)***
App of Bty & Exc	3.13	1.02	3.22	0.92	None
Bravery	3.63	0.54	3.46	0.60	None
Love	4.05	0.48	3.83	0.87	None
Prudence	3.74	0.58	3.97	0.69	None
Teamwork	3.91	0.50	3.82	0.59	None
Creativity	3.72	0.72	3.50	0.75	None
Curiosity	3.93	0.62	3.88	0.57	None
Fairness	4.23	0.48	4.38	0.43	None
Forgiveness	3.90	0.67	3.88	0.69	None
Gratitude	3.95	0.57	3.57	0.66	None
Honesty	4.39	0.43	4.37	0.39	None
Hope	3.93	0.46	3.73	0.46	None
Humor	4.08	0.70	3.90	0.59	None
Perseverance	3.90	0.67	4.13	0.54	None
Judgment	4.38	0.44	4.50	0.38	None
Kindness	4.07	0.53	4.08	0.45	None
Leadership	3.93	0.48	3.70	0.43	None
Love of Learning	3.44	0.79	3.90	0.74	None
Humility	3.64	0.68	3.58	0.61	None
Perspective	3.77	0.61	3.70	0.51	None
Self-Regulation	3.52	0.66	3.37	0.59	None
Social Intelligence	3.58	0.66	3.39	0.88	None
Spirituality	3.31	1.08	2.87	1.03	None
Zest	3.57	0.61	3.38	0.53	None

The results of this wave analysis allow us to explore the four investigative questions for Phase 2, each demonstrating how the VIA Inventory for Character Strengths might be used in an Air Force environment.

1. What are the character strengths of the average AFIT Airman?

To answer the first investigative question a second Tukey test was performed comparing the 24 mean scores for the character strengths measured by the VIA Inventory. This Tukey test produced several statistical ties, demonstrating the difficulties in both (a) working with a small sample and (b) in quantifying an inherently qualitative phenomenon (such as character). In handling ties between character strengths, the official guidelines for the use of the VIA Inventory were followed, which recommend ranking the tied strengths according to the individual's (or in the case here, the researcher's) own perception. To do so, each category recognized by the Tukey test was ranked from 1 to 9 (see Appendix A, Table 12). The average rank of each character strength was then calculated, allowing the strengths to be ranked from 1 to 24. As seen in Table 7, this removed most of the ties in order to simplify the analysis.

As a result, the top strengths within the sample were Judgment (4.43), Honesty (4.38), and Fairness (4.29), and the bottom strengths were Appreciation of Beauty and Excellence (3.16) and Spirituality (3.14). Cut-offs for determining the top and bottom strengths were arbitrary, and determined primarily by the distance between these mean scores and the means immediately above and below them: the third strength, Fairness, was much closer to Honesty (a difference of 0.09) than to Kindness (0.22), and the twenty-third strength, Appreciation of Beauty and Excellence, was much closer to Spirituality (a difference of only 0.02) than to Self-Regulation (0.30). Interestingly, while no relationship between Judgment and the Air Force virtues was identified in Phase 1 of the study, the AFIT sample ranked Judgment higher than any other strength in the VIA Classification.

Table 7, Rank Ordering of the Character Strengths of AFIT Airmen

Rank	Strength	Mean	Std Dev	Breusch-Pagan
1	Judgment	4.43	0.42	0.116
2	Honesty	4.38	0.41	0.850
3	Fairness	4.29	0.46	0.728
4	Kindness	4.07	0.50	0.818
5	Humor	4.01	0.66	0.743
6	Perseverance	3.99	0.63	0.061
7	Love	3.97	0.66	0.143
8	Curiosity	3.91	0.60	0.787
9	Forgiveness	3.89	0.67	0.768
10	Teamwork	3.88	0.54	0.140
13	Hope	3.85	0.47	0.139*
13	Leadership	3.84	0.47	0.618
13	Prudence	3.83	0.63	0.597
13	Gratitude	3.80	0.63	0.319
13	Perspective	3.75	0.57	0.915
17	Creativity	3.64	0.74	0.863
17	Humility	3.62	0.65	0.105
17	Love of Learning	3.61	0.79	0.943
19	Bravery	3.57	0.56	0.695
20	Social Intelligence	3.51	0.75	0.106
21	Zest	3.50	0.58	0.510
22	Self-Regulation	3.46	0.63	0.499
23	App of Bty & Exc	3.16	0.97	0.401
24	Spirituality	3.14	1.08	0.901

Note: For the Breusch-Pagan test in column 5, a p-value > .05 means that we *fail to reject* the null hypothesis that the data has constant variance. As noted in the text, to achieve this value for the strength of Hope required the exclusion of a single outlier. This p-value is marked above with an asterisk (*).

2. How do the character strengths of the average AFIT Airman align with the Air Force Core Values?

To answer the second investigative question, the results of question 1 were narrowed down to the nine VIA character strengths identified in Phase 1 and displayed separately in Table 8. Of note here, although Honesty and Fairness both rank high in the sample, the remaining character strengths associated with the Air Force virtues are spread widely from sixth to twenty-second place. The ranking of each Core Value also varies

widely: the strengths related to **Integrity First** are ranked second (Honesty), seventeenth (Humility), and nineteenth (Bravery), those related to **Service Before Self** are ranked third (Fairness), tenth (Teamwork), and twenty-second (Self-Regulation), and those related to **Excellence In All We Do** are ranked sixth (Perseverance), thirteenth (Leadership), and seventeenth (Creativity). This suggests that Airmen identify with some aspects of the Core Values much more often than other aspects, a phenomenon which may or may not have something to do with formal ethics education in PME (for which, see question 4 below).

Table 8, Rank Ordering of Air Force-Related Character Strengths among AFIT Airmen

Rank	Strength	Mean	Std Dev	Breusch-Pagan
2	Honesty	4.38	0.41	0.850
3	Fairness	4.29	0.46	0.728
6	Perseverance	3.99	0.63	0.061
10	Teamwork	3.88	0.54	0.140
13	Leadership	3.84	0.47	0.618
17	Creativity	3.64	0.74	0.863
17	Humility	3.62	0.65	0.105
19	Bravery	3.57	0.56	0.695
22	Self-Regulation	3.46	0.63	0.499

3. ***How do the character strengths of the average AFIT Airman compare to those of the average cadet at the US Military Academy and to those of the average American?***

The ranking of AFIT character strengths from question 1 were then compared to those previously identified by Matthews et al. (2006) using samples taken from the United States Military Academy at West Point (n = 103) and a larger sample of US civilians from the VIA Institute's database (n = 838). Since the individual averages for each character strength used by Matthews and his colleagues were not available for this

study, the comparison of character strengths presented in Table 8 is strictly nominal, and subject to the constraints of each study. Due to the smaller sample size in the present study (n = 60), a higher p-value was used ($p < .1$ versus the $p < .05$ by Matthews et al.), which led to many more statistical ties than seen previously. This nominal comparison serves as the best approximation of the character strengths of AFIT Airmen compared to two samples from related populations. A simplified comparison of these three samples focusing on the nine VIA character strengths identified in Phase 1 is provided in Table 9.

There are three character strengths of note in this comparison: Honesty, Leadership, and Bravery. Among the character strengths related to the Air Force Core Values, Honesty ranked the *highest* among all three samples, demonstrating the important role integrity plays, regardless of occupation or setting. Similarly, Leadership consistently presented itself as a *moderate* strength that is neither strong nor weak, which means that, regardless of profession, some will be leaders and some will be followers. Perhaps more interesting is the strength of Bravery, which shows considerable variability from sample to sample. The nature of military service more than likely accounts for much of the difference seen between the West Point (4th) and US civilian (16th) samples. However, something else seems to be occurring in the AFIT sample, in which Bravery ranks even lower than among civilians (19th). In this case, it is possible that the AFIT sample's top strength of Judgment (mean = 4.43; see Table 6) is offsetting their strength of Bravery (mean = 3.57). There are at least two possible explanations for this relationship. The first is that AFIT inherently encourages the development of Judgment due its role as a military institution with an academic mission. Alternatively, the ranking of these two strengths could also indicate that Airmen are uncertain of which risks are

acceptable to take. Or to word this as a question, "*What is a necessary risk?*" Either of these explanations is consistent with Peterson and Park's (2009:31) previous statement on how people make trade-offs between strengths "in characteristic ways" in day-to-day living. A longitudinal study with a larger sample size would better demonstrate whether either of these suppositions has any real explanatory value.

Table 9, Rank Ordering of Character Strengths in Two Studies & Three Samples

AFIT Airmen (n = 60) $p < .1$	West Point (n = 103) $p < .05$ (Matthews et al., 2006)	US Civilians (n = 838) $p < .05$ (Matthews et al., 2006)
Judgment (1)	Honesty (1)	Kindness (1)
Honesty (2)	Perseverance (2)	Humor (2)
Fairness (3)	Hope (3)	Honesty (3.5)
Kindness (4)	Bravery (4)	Love (3.5)
Humor (5)	Curiosity (5.5)	Judgment (5)
Perseverance (6)	Teamwork (5.5)	Gratitude (6.5)
Love (7)	Kindness (7)	Curiosity (6.5)
Curiosity (8)	Humor (8)	Fairness (8)
Forgiveness (9)	Judgment (9)	Perspective (9)
Teamwork (10)	Fairness (10)	Social Intelligence (10)
Hope (13)	Love (11)	Teamwork (11)
Leadership (13)	Gratitude (12.5)	Hope (12)
Prudence (13)	Social Intelligence (12.5)	Leadership (13)
Gratitude (13)	Perspective (14)	Creativity (14)
Perspective (13)	Spirituality (15.5)	App of Bty & Exc (15)
Creativity (17)	Leadership (15.5)	Bravery (16)
Humility (17)	Self-Regulation (17.5)	Perseverance (17)
Love of Learning (17)	Creativity (17.5)	Zest (18)
Bravery (19)	Zest (19.5)	Spirituality (19)
Social Intelligence (20)	Humility (19.5)	Forgiveness (20)
Zest (21)	Love of Learning (21.5)	Love of Learning (21)
Self-Regulation (22)	Prudence (21.5)	Prudence (22)
App of Bty & Exc (23)	Forgiveness (23)	Humility (23)
Spirituality (24)	App of Bty & Exc (24)	Self-Regulation (24)

Table 10, Rank Ordering of Air Force-Related Character Strengths in Two Studies & Three Samples

AFIT Airmen (n = 60) $p < .1$	West Point (n = 103) $p < .05$ (Matthews et al., 2006)	US Civilians (n = 838) $p < .05$ (Matthews et al., 2006)
Honesty (2)	Honesty (1)	Honesty (3.5)
Fairness (3)	Perseverance (2)	Fairness (8)
Perseverance (6)	Bravery (4)	Teamwork (11)
Teamwork (10)	Teamwork (5.5)	Leadership (13)
Leadership (13)	Fairness (10)	Creativity (14)
Creativity (17)	Leadership (15.5)	Bravery (16)
Humility (17)	Self-Regulation (17.5)	Perseverance (17)
Bravery (19)	Creativity (17.5)	Humility (23)
Self-Regulation (22)	Humility (19.5)	Self-Regulation (24)

4. Is there any relationship between (a) age, rank, PME completion, or Air Force Specialty and (b) high scores for particular character strengths?

In order to answer the fourth investigative question, the Data Analysis Add-In within Microsoft Excel® was used to build 24 linear regression models and to evaluate each model using the Breusch-Pagan test for constant variance. The purpose of these regressions was not to build a predictive model for each VIA character strength, but to identify factors that significantly influenced each score at the level $p < .1$ based on the sample (this means that in nine out of ten such tests, these factors would continue to be significant). The dependent (y) variable for each model was continuous and consisted of each individual's average score for each VIA character strength. Fifteen independent (x) variables were identified, all of which were nominal (1s and 0s). Several variables for which little data (0 to 2 participants) had been collected were excluded so as not to bias the regression. These excluded variables were AFIT Staff, AFIT Enlisted, AFSC Categories 4 and 5, SNCOA, and AWC. The mean scores (y) of each participant remained part of the regression, but the columns containing these variables (x) were

deleted. The regression also made no attempt to determine the effect of the now-discontinued Air and Space Basic Course (ASBC), which some participating officers no doubt attended. The remaining variables used in the regression are as follows:

- **Age**
  1. 1 for Millennials (born 1981-2000), 0 for Generation X (born 1965-1980)
- **Gender**
  2. 1 for Females, 0 for Males
- **AFIT Status** (each with a separate column of 1s and 0s)
  3. MS Students
  4. PhD Students
  5. Faculty
- **Rank** (each with a separate column of 1s and 0s)
  6. CGOs
  7. FGOs
- **Operational Areas** (first number in AFSC; each with a separate column of 1s and 0s)
  8. Category 1 (Operations)
  9. Category 2 (Logistics)
  10. Category 3 (Support)
  11. Category 6 (Acquisitions, etc.)
- **PME Completion** (with a 0 baseline of "No PME"; each with a separate column of 1s and 0s)
  12. ALS
  13. NCOA
  14. SOS
  15. ACSC

For example, the first regression run was for the VIA character strength, Appreciation of Beauty and Excellence. Using these 15 independent variables (each with 60 data points, for a total of 900), the model identified two factors that had a significant effect on one's score. Compared to the sample's average, participants who successfully completed ALS gave themselves a score 1.78 points lower, and participants who successfully completed ACSC gave themselves a score 2.53 points lower. No other factors had a significant effect on one's score for Appreciation of Beauty and Excellence.

Excel® was then used to test each model for constant variance using the Breusch-Pagan test. Constant variance is essentially the assumption that the "spaces" between data points are uniform and linear enough to be described using a linear equation, and to identify the factors that determine these "distances." To do this, the residuals for the original model were saved and then squared (to remove the effect of any negative numbers) and a new regression was run, but with the new *squared residuals* as the dependent variable. For Appreciation of Beauty and Excellence, the resulting p-value for the Breusch-Pagan test was .40. Since this p-value is greater than .05 there is good reason to *fail to reject* the hypothesis that the regression has constant variance, which allows the data to be modeled using linear regression.

Only one model (for Hope) initially failed the Breusch-Pagan test. The data for this model was then input into JMP® in order to identify the outlier causing the fail. This particular respondent had a very low score for Hope, and the "distance" between its value and the sample mean was simply too great for the regression to account for. Excluding this participant from this model and rerunning the regression identified three significant factors for Hope (Females, AFSC 1, and AFSC 3), and *failed to reject* the hypothesis for constant variance with a p-value of .14. Outliers such as this are common not only in statistics but in the classroom, where the judgment of the instructor (rather than some linear formula) is better suited to address both the strengths of the group as a whole, as well as the needs of specific students.

After applying regressions to each of the 24 VIA character strengths, several factors were significantly related with a level of significance at $p < .1$. These factors, and the average effect they had on specific scores on the VIA Inventory are summarized in

Table 11. There were also several factors that had no significant relationship with particular character strengths. These include one's status as either an AFIT Masters Student or Faculty Member. Additionally, several character strengths not related to the Air Force Core Values had no significant relationship to the factors in the models, including Forgiveness, Gratitude, Hope, Humor, Kindness, Love, Prudence, Social Intelligence, and Zest. More importantly, two character strengths identified in Phase 1 as related to the Core Value **Excellence In All We Do** had no significant relationship to the factors tested: Creativity and Leadership. This means that neither increasing rank nor PME completion had any significant effect on Airmen's use of these strengths. As noted above, due to the small sample size, both the significant and insignificant factors merit further study as *variables of interest for future longitudinal studies*, and do not serve as descriptive claims of *AFIT* Airmen or *American* Airmen.

Summary

Using standard survey methodology and statistical analysis, Phase 2 demonstrates how the VIA Inventory might be used in an Air Force environment. As discussed previously, data on the character strengths of Airmen is needed not only to determine the effect of socialization on the basic assumptions of Airmen, but may also be useful in determining the effectiveness of Air Force ethics programs. The VIA Inventory of Strengths was administered to Active Duty Airmen at AFIT in order to explore four investigative questions:

1. What are the character strengths of the average AFIT Airman?
2. How do the character strengths of the average AFIT Airman align with the Air Force Core Values?

3. How do the character strengths of the average AFIT Airman compare (a) to those of the average cadet at the US Military Academy and (b) to those of the average American (as determined by Matthews et al., 2006)?
4. Is there any relationship between (a) age, rank, PME completion, or Air Force Specialty and (b) high scores for particular character strengths?

The aggregated survey results were then analyzed to explore the kind of questions the VIA Inventory and identified several factors that merit further study as variables of interest for future longitudinal studies by Air University.

Table 11, Factors with Significant Effects on Character Strengths

Cohort	Positive	Negative
Millennials		Bravery, -0.732 Honesty, -0.642
Females	Hope, +0.306	
PhD Students	Honesty, +0.852 Perseverance, +1.583	
CGOs		Self-Regulation, -1.072
FGOs	Perspective, +1.136 Teamwork, +1.24	
AFSC 1	Hope, +1.163 Judgment, +1.352	
AFSC 2	Perspective, +1.318	
AFSC 3	Hope, +1.064 Judgment, +1.239 Perspective, +1.682	
AFSC 6	Judgment, +0.937	
ALS		App. Of Bty & Exc, -1.783 Bravery, -0.767
NCOA	Fairness, +0.729	
SOS		Self-Regulation, -0.365 Spirituality, -0.646
ACSC		App. Of Bty & Exc, -2.529 Bravery, -0.824 Curiosity, -1.109 Humility, -1.3 Judgment, -0.642 Love of Learning, -1.237

V. Conclusions

Overview

The purpose of this study has been to operationalize the Air Force Core Values using the tools of positive psychology. Although the Air Force has adopted certain tenets and tools of positive psychology into its resilience training, little research has been done thus far to apply its insights to address the central questions facing Air Force ethics. To fill this gap, this study established two complementary research objectives:

1. Determine the relationship of the Air Force Core Values to the VIA Classification of Character Strengths, and consider the implications of this relationship.
2. Demonstrate how the VIA Inventory of Strengths might be used in an Air Force environment.

To meet these objectives, a Qualitative Preliminary research design was used, in which an initial qualitative phase of study helped to guide the data collection and analysis of a quantitative phase. The qualitative phase (Phase 1) of the study used lexical semantics techniques to map the Air Force Core Values to the VIA Classification of Character Strengths. The quantitative phase (Phase 2) used standard survey methodology and statistical analysis to administer the VIA Inventory of Strengths to Active Duty Airmen at the Air Force Institute of Technology. This chapter will summarize the conclusions of this research, its implications for ethics instruction, some short- and long-term recommendations for Air Force ethics, and areas of interest for future research.

Conclusions of Research

The first research objective was to determine the relationship of the Air Force Core Values to the VIA Classification of Character Strengths, and to consider the implications of this relationship. Phase 1 determined a strong relationship between four Air Force virtues and VIA character strengths, and five weaker relationships between other pairs. Strong relationships between the Air Force virtues and the VIA character strengths were Honesty → Honesty, Courage → Bravery, Loyalty → Teamwork, and Respect → Fairness. Weaker relationships include Accountability → Humility, Duty → Self-Regulation, Mission → Creativity, Discipline → Perseverance, and Teamwork → Leadership. This mapping makes it possible to use the VIA Inventory of Strengths to see how well the Air Force imparts its Core Values to Airmen.

The second research objective was to demonstrate how the VIA Inventory of Strengths might be used in an Air Force environment. Phase 2 administered the VIA Inventory of Strengths to AFIT Airmen and demonstrated both the types of questions that can be asked using the Instrument, as well as certain factors of interest for future studies. In particular, the study explored four investigative questions:

1. **What are the character strengths of the average AFIT Airman?** The top strengths within the sample were Judgment, Honesty, and Fairness, and the bottom strengths were Appreciation of Beauty and Excellence and Spirituality.
2. **How do the character strengths of the average AFIT Airman align with the Air Force Core Values?** Of the nine character strengths related to the Air Force Core Values, only Honesty and Fairness ranked high in the sample. Additionally, the highest strength in the sample (Judgment) was not identified in Phase 1 as related to the Core Values.
3. **How do the character strengths of the average AFIT Airman compare (a) to those of the average cadet at the US Military Academy and (b) to those of the average American (as determined by Matthews et al., 2006)?** Honesty ranked high in all three samples, Leadership was a moderate strength

in all three samples, and Bravery showed the most variability, possibly due to the effects of academic setting and military service.

4. **Is there any relationship between (a) age, rank, PME completion, or Air Force Specialty and (b) high scores for particular character strengths?** A total of 13 of the 15 dependent variables tested had a significant effect on a total of 13 of the 24 scores for character strengths on the VIA Inventory.

These quantitative results provide a baseline for future longitudinal studies by AU.

Using the VIA Inventory in Air Force PME

Although some of the implications of these results have been discussed in previous chapters, a few points remain on how to interpret these findings and, more broadly, how they shape the way ethics might be approached in an Air Force classroom. This section will synthesize some of these points as they pertain to ethics education both within the Air Force and without.

1. ***Paint a picture***. Air Force ethics is about making good people better, not about making bad people good. Despite the fact that certain demographic factors are significantly related to certain character strengths, *no* factors were significant for *all* strengths. This means that the relative character strengths in the sample did not differ all that much based on generation, gender, current academic status, rank, occupational subspecialty, or the level of PME completed. As Smith (1998:48) noted previously, "The service's line-officer corps appears to provide a basic infrastructure upon which the Air Force can build cohesion." The goal of ethics education is not to *correct* the ethics of individual Airmen but to, "Impart some sense of order, some overarching scheme of discipline, to the ethical sense and awareness that already exist" (Toner, 1998:no page numbers). And as Pavela (2015:8) stated, teachers can begin by simply helping students

determine answers to "two classic formulations: *How is a good life defined?* and [sic] *How will the values and habits you are acquiring now help you lead a good life?*".

2. *Discuss strengths before weaknesses*. As noted previously, "virtually everyone has some notable strengths of character"—their "signature strengths"—which define one's individual personality (Peterson & Park, 2009:29). Feedback from the VIA Inventory should focus on identifying and strengthening these implicit strengths. This principle applies in at least two ways. First, the "signature strengths" of the group should be discussed before both (1) their collective bottom strengths and (2) the strengths that relate to the Core Values. As Mayerson (2015:1) found from using this strategy:

> Once I was able to help clients see their positive strengths, this perspective seemed to become a launching pad for more adaptive choices. When we focused on what was wrong with them, their body language would reflect demoralization and often resistance. But when we focused on their strengths of character, they seemed to sit up straighter, their eyes seemed to come alive, and their voices were energized.

Additionally, this means that the VIA Inventory should ***not*** be used to grade Airmen (individually or as a group) on how well they internalize the Air Force Core Values. Instead, the results of the VIA Inventory given prior to the beginning of an Air Force PME course would help Air Force officials (especially over time) see how well *the organization* is imparting these values. As Asalone (2015:195) writes, this positive approach "moves employees toward strengths, but also set[s] up a later conversation I hold with leaders about their organization." Taken together, this means addressing character weaknesses soon after discussing a group's strengths. Not only does this help them assess themselves realistically, it also creates opportunities for instructors to show

students how they "can leverage a top strength to pull up a bottom strength" (Polly & Britton, 2015:65).

3. ***When using research, less is more***. As Haidt (2012:57) reminds us, "If you want to change people's minds, you've got to … elicit new intuitions, not new rationales." For this reason, instructors should identify a "couple of well-chosen studies," rather than a litany of readings, which may actually overwhelm the brain's capacity to make decisions (Asalone, 2015:195; see Haidt, 2012:40). One particular area these readings should cover is "how situational and cognitive influences can lead people to act contrary to their moral beliefs," including treatments of "cognitive biases, rationalizations, moral intensity, moral disengagement, moral approbation, and ethical blindness" (Stanfield, 2015:20).

4. ***Use great literature***. As Cain (2005:175) notes, if the goal is for students to "learn and become conditioned in the proper use and possession of emotions," the affective power of art should not be underestimated. Or as MacIntyre (2007:216) notes, "man is … a story-telling animal." By depicting human nature both *as it is* and *as it should be*, literature does quite naturally what ethics attempts to do systematically: to provide an account of human nature and moral action so that individuals know how to feel, how to think, and how to act in particular situations (MacIntyre, 2007:33-34, 58, 162). Both Toner (1998) and the present author prefer C.S. Lewis' *The Abolition of Man* (1944/2001), while Stanfield (2015:21) recommends, "including a contemporary book on ethics in the annual CSAF Reading List." In either case, as Pavela (2015:5) noted, "History, literature, art, and all the humanities, can promote student ethical development

by telling stories rich with human drama. Good teaching can bring the drama alive, and use it to raise timeless moral questions."

5. ***Aim for wisdom, not just knowledge***. As Peterson and Park (2009:31) explain, curricula "are optimal when they combine didactic instruction with hands-on experience and extensive practice. Think about it, talk about it, and do it—over and over again." Exercises that provide such activities include personal action plans (Asalone, 2015:197) or case studies (Bertha, 2006). Additionally, Stanfield (2015:21) recommends having students write an "ethics autobiography" or "about ethical violations they have witnessed and what they would have done in the same situation," and even "having students perform an oral or written defense of an ethical position." As Bertha (2006:1) explains, this more holistic, experiential approach to moral education seeks to balance what Aristotle called "theoretical knowledge" (*episteme*) with "practical wisdom" or prudence (*phronesis*) (see Aristotle, 1995a:1140-1142). As Schwartz and Sharpe (2006:384) wrote, "We need to know what *this* friend needs, not what friends in general need. And we need to know what she needs at *this* moment, not in general. This is why rules are no substitute for practical wisdom." By being taught the value of character strengths, and then being given opportunities to think through how character strengths apply in given situations, students are better prepared to adopt ethical courses of action.

Recommendation

Based on these conclusions, this study recommends that Air University develop milestones for the implementation of the VIA Inventory of Strengths as a course pre-survey in Air Force PME courses. At minimum, this will probably require several steps.

First, revise course requirements and internal guidance in order to streamline the approval process for instructors to use the VIA Inventory for the values-ethics components of PME. Second, train instructors on the creation and use of VIA Pro Sites at www.viacharacter.org. This will enable instructors to collect and analyze their students' responses in order to guide classroom activities and graded assignments. Third, Air University should develop an internal mechanism and related processes by which instructors aggregate their class-level reports for further organizational analysis. The data collection and analysis procedures in Chapter IV provide a framework for this process and a baseline for certain variables of interest.

Future Research

These conclusions also point to three areas in need of future research. The first is to strongly consider possible revisions to *The Little Blue Book* (2015) based on the insights of Phase 1. Chapter III suggested the following as starting points for future discussion:

1. Replace the section on "Respect" (4) with one on "Character" or "Habits"
2. Under **Integrity First** replace *Accountability* with *Humility* (which actually restores a trait from *The Little Blue Book*, 1st ed., 1997)
3. Under **Service Before Self** replace *Duty* with *Discipline*
4. Under **Excellence In All We Do** replace *Mission*, *Discipline*, and *Teamwork* with *Creativity*, *Perseverance*, and *Leadership*

Only time and further discussion among Air Force leaders and ethicists will determine the wisdom or folly of such suggestions. As Haidt (2012:342) warns, "Moral communities are fragile things, hard to build and easy to destroy," and so the Air Force should take as much time as necessary to fully consider these changes.

A second question for future research is how values-based education programs and resilience training might work together to develop strong character. As noted previously, Air Force resilience training has already incorporated many of the insights of positive psychology into its curriculum. It could be claimed that doing the same in ethics education would create unintended redundancies between the two programs, but such a claim masks a redundancy that already exists. Positive psychology's broader conception of character may provide a more integrated, less piecemeal, and more resilient approach to ethics education, while *reducing* the amount of time Airmen spend in the classroom. This could lead to a modular form of ethics education that focuses on the signature strengths and bottom strengths of each class, rather than teaching the exact same strengths (such as those related to the Core Values) to every group of students. This content would be *standardized* (always dealing with a subset of the 24 VIA character strengths), but it would also be *flexible*, driven by the reported character strengths of the students themselves and the judgment of the instructor (see Krawczyk, 1997; Toner, 1998; Schwartz & Sharpe, 2006). For more information, see Seligman's 2011 book, *Flourish*, in which he devotes an entire chapter to similar efforts in the US Army (chapter 7, "Army Strong: Comprehensive Soldier Fitness").

Additionally, future research is needed to identify areas in which *institutional changes* might demonstrate better results than values-based education programs. In certain cases, situational factors may very well *point* Airmen toward unethical decisions. As Haidt (2012:106) notes, while ethics education can be part of a solution, in many cases, "You can make minor and inexpensive changes to the environment, which can produce big increases in ethical behavior," a statement fully in keeping with Schein's

Model of Organizational Culture (Schein, 2004; Erez & Gati, 2004:585). Similarly, Peterson and Seligman (2004:11) state that several potential conditions either enable or constrain the way character presents itself including, the "existence of mentors, role models, and supportive peers." A good starting point for such a study would be Heath and Heath's 2010 work, *Switch*, which applies Haidt's (2001; 2012) Social Intuitionist Model of Moral Judgment to organizational change.

Summary

The purpose of this study has been to operationalize the Air Force Core Values using the tools of positive psychology. To do so, it used a qualitative preliminary research design, in which an initial qualitative phase helped to guide the data collection and analysis of a quantitative phase. The qualitative phase (Phase 1) of the study used lexical semantics techniques to map the Air Force Core Values to the VIA Classification of Character Strengths. This was then followed by a quantitative phase (Phase 2) using standard survey methodology and statistical analysis to administer the VIA Inventory of Strengths to Active Duty Airmen at AFIT.

This chapter has summarized the conclusions of this research, recommended the use of the VIA Inventory of Strengths throughout Air Force PME, and noted three areas of interest for further research: future revisions to *The Little Blue Book* (2015), a more coordinated approach to character and resilience, and a Social Intuitionist approach to shaping ethical behavior in organizations.

Appendix A: Human Subject Exemption Approval

DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY
WRIGHT-PATTERSON AIR FORCE BASE OHIO

3 January 2017

MEMORANDUM FOR DR. KENNETH L. SCHULTZ

FROM: Jeffrey A. Ogden, Ph.D.
AFIT Exemption Determination Official
2950 Hobson Way
Wright-Patterson AFB, OH 45433-7765

SUBJECT: Approval for exemption request from human experimentation requirements (32 CFR 219, DoDD 3216.2 and AFI 40-402) for AFIT Character Strengths Study

Your request was based on the Code of Federal Regulations, title 32, part 219, section 101, paragraph (b) (2) Research activities that involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior unless: (i) Information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) Any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

1. Your study qualifies for this exemption because you are not collecting sensitive data, which could reasonably damage the subjects' financial standing, employability, or reputation. Further, the demographic data you are collecting, if any, and the way that you plan to report it cannot realistically be expected to map a given response to a specific subject.

2. This determination pertains only to the Federal, Department of Defense, and Air Force regulations that govern the use of human subjects in research. Further, if a subject's future response reasonably places them at risk of criminal or civil liability or is damaging to their financial standing, employability, or reputation, you are required to file an adverse event report with this office immediately.

X

Jeffrey A. Ogden, Ph.D.
IRB Exempt Determination Official

Appendix B: Results of Statistical Tests

Wave Analysis

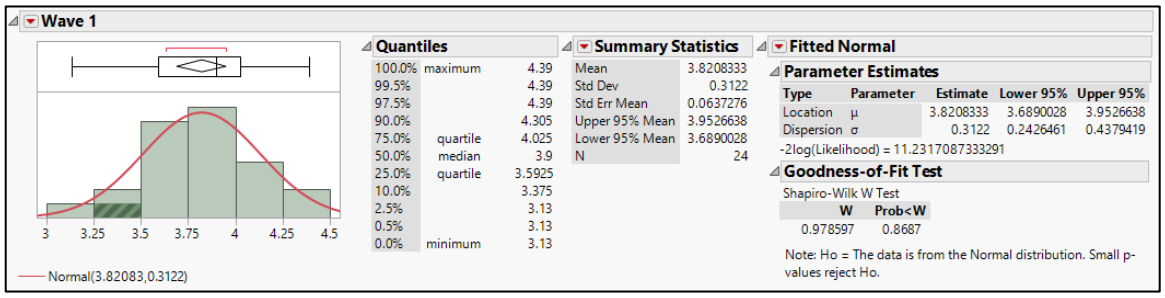


Figure 7, Distribution of Wave 1 Means

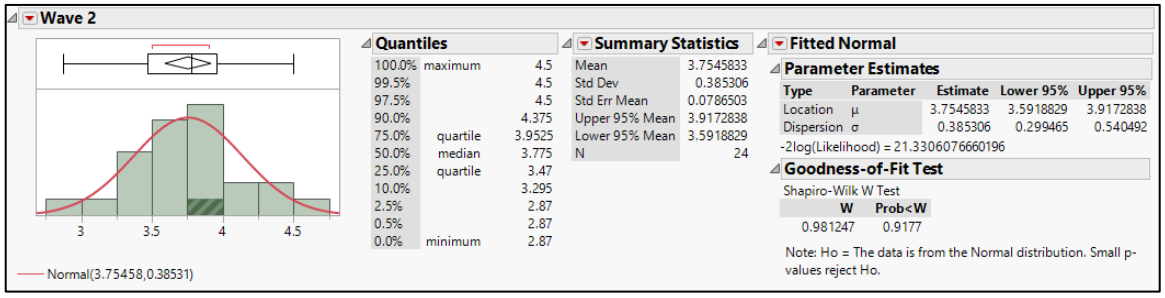


Figure 8, Distribution of Wave 2 Means

Determining Honest Differences Between Means

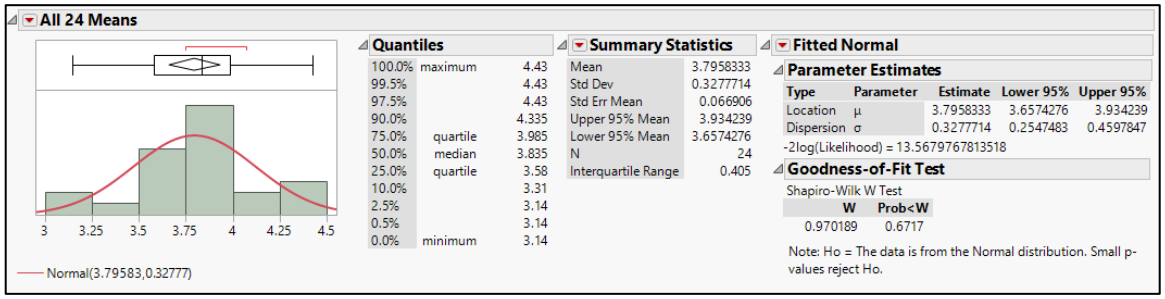


Figure 9, Distribution of All 24 Means to Test for Honest Differences

Table 12, Honest Differences Between the 24 Character Strengths

Original Tukey													
	A	B	C	D	E	F	G	H	I	J	K	Avg	Rank
Judgment	1											1	1
Honesty	1	2										1.5	2
Fairness	1	2	3									2	3
Kindness	1	2	3	4								2.5	4
Humor		2	3	4	5							3.5	5
Perseverance		2	3	4	5							3.5	6
Love			3	4	5	6						4.5	7
Curiosity			3	4	5	6	7					5	8
Forgiveness			3	4	5	6	7	8				5.5	9
Teamwork				4	5	6	7	8				6	10
Hope				4	5	6	7	8	9			6.5	13
Leadership				4	5	6	7	8	9			6.5	13
Prudence				4	5	6	7	8	9			6.5	13
Gratitude				4	5	6	7	8	9			6.5	13
Perspective				4	5	6	7	8	9			6.5	13
Creativity					5	6	7	8	9			7	17
Humility					5	6	7	8	9			7	17
Love of Learning					5	6	7	8	9			7	17
Bravery						6	7	8	9	10		8	19
Social Intelligence							7	8	9	10	11	9	20
Zest								8	9	10	11	9.5	21
Self-Regulation									9	10	11	10	22
App of Bty & Exc										10	11	10.5	23
Spirituality											11	11	24

Distribution of Each Character Strength for Linear Regressions

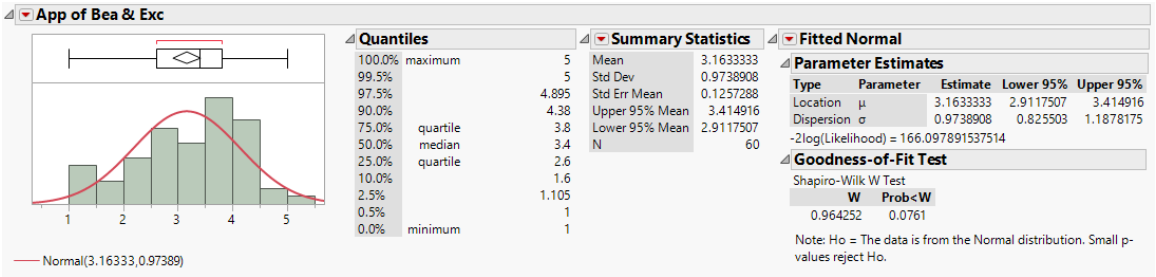


Figure 10, Distribution of Individual Scores for Appreciation of Beauty & Excellence

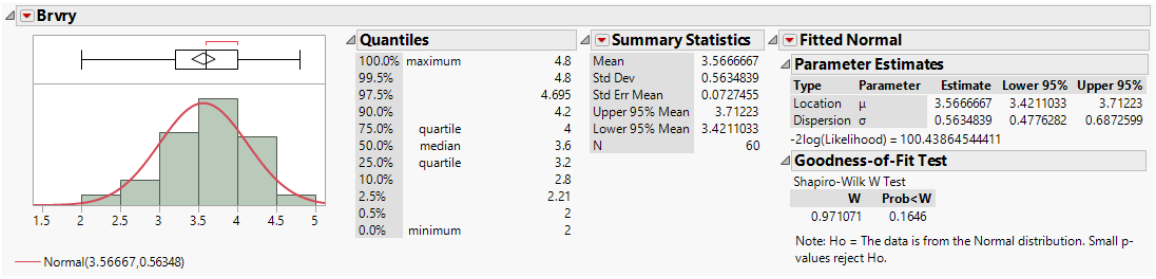


Figure 11, Distribution of Individual Scores for Bravery

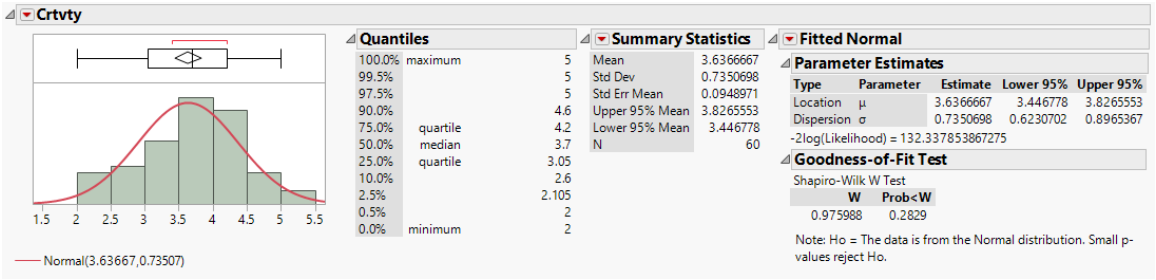


Figure 12, Distribution of Individual Scores for Creativity

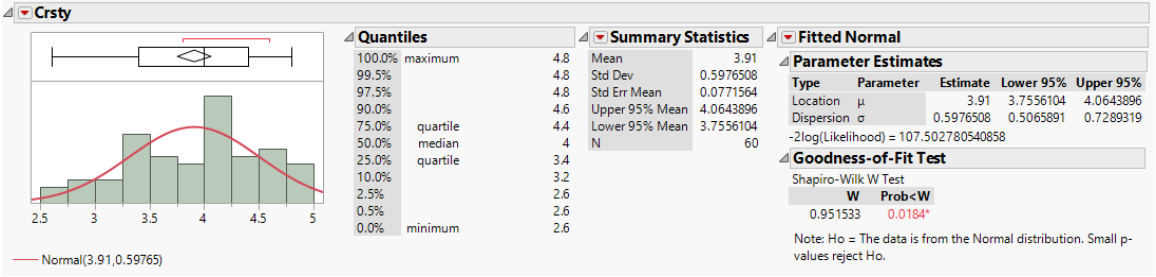


Figure 13, Distribution of Individual Scores for Curiosity

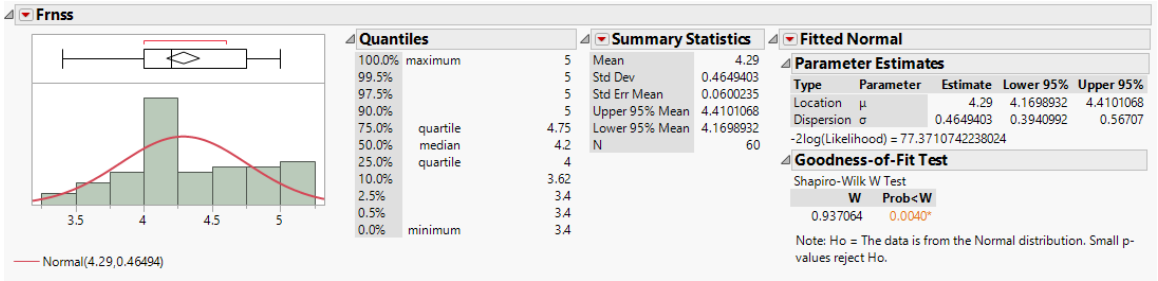


Figure 14, Distribution of Individual Scores for Fairness

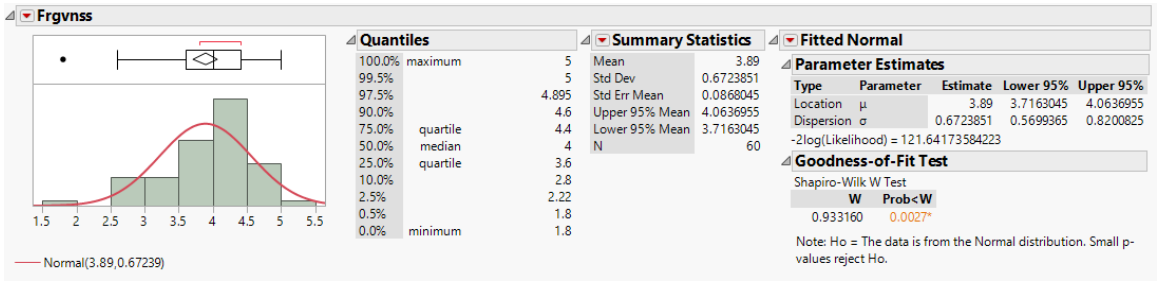


Figure 15, Distribution of Individual Scores for Forgiveness

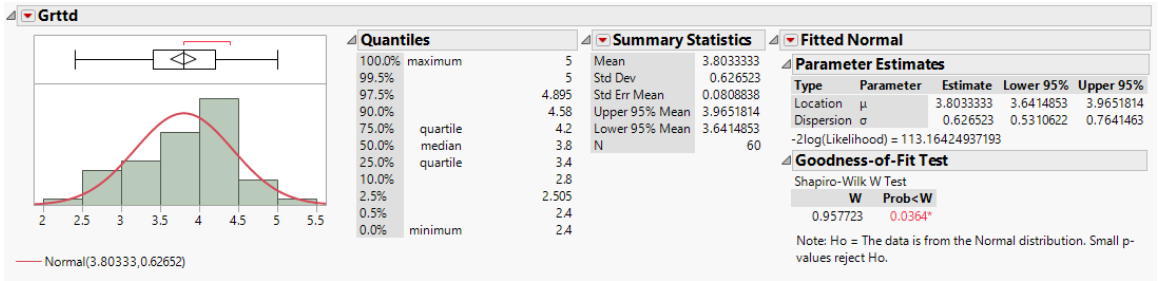


Figure 16, Distribution of Individual Scores for Gratitude

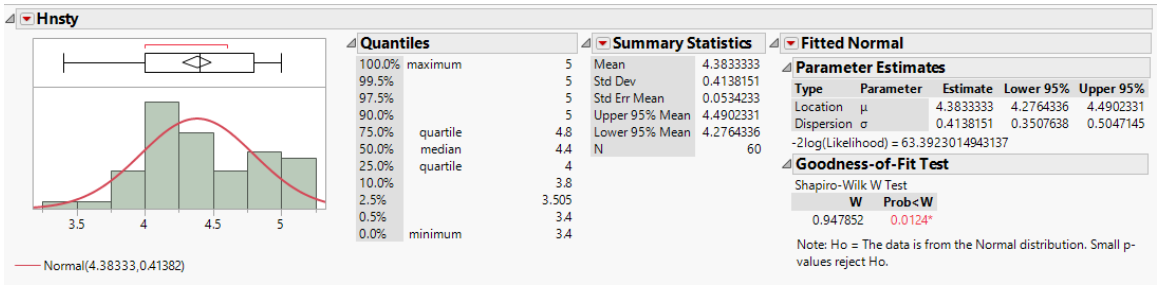


Figure 17, Distribution of Individual Scores for Honesty

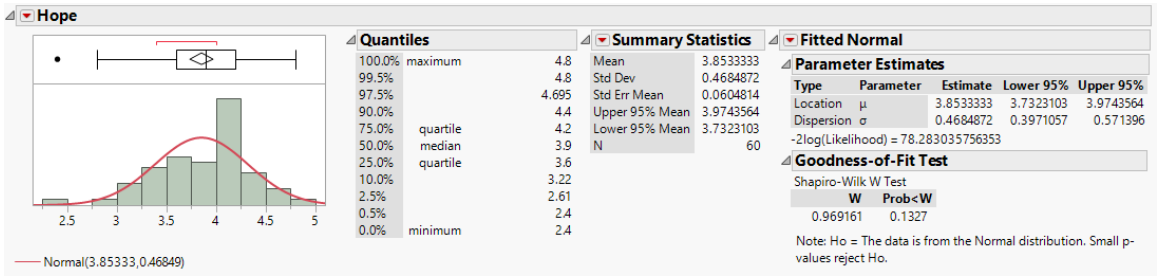


Figure 18, Distribution of Individual Scores for Hope

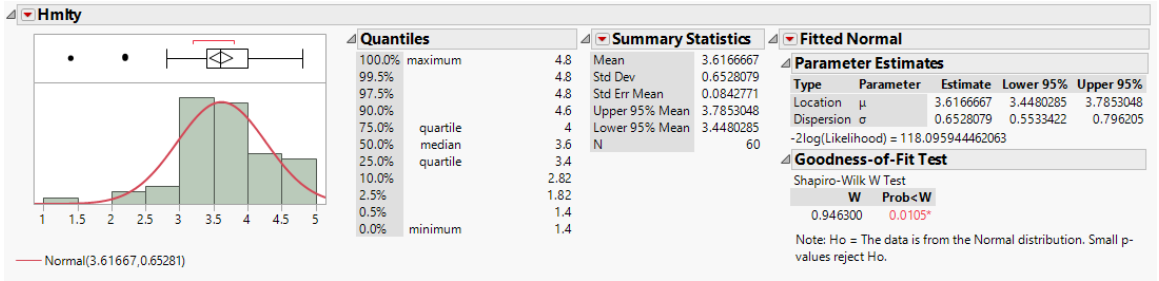


Figure 19, Distribution of Individual Scores for Humility

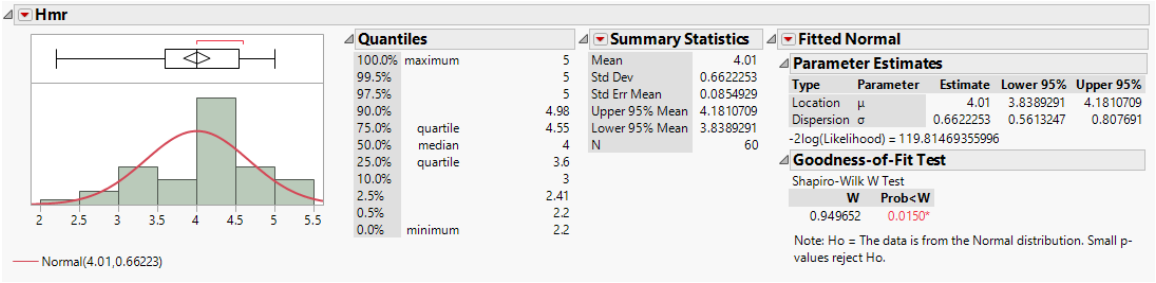


Figure 20, Distribution of Individual Scores for Humor

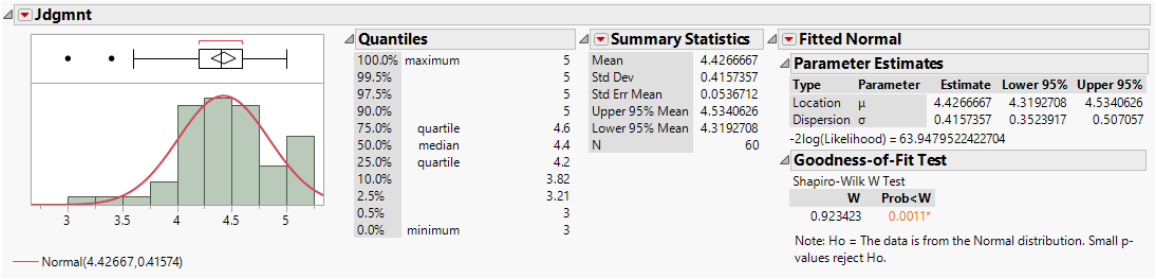


Figure 21, Distribution of Individual Scores for Judgment

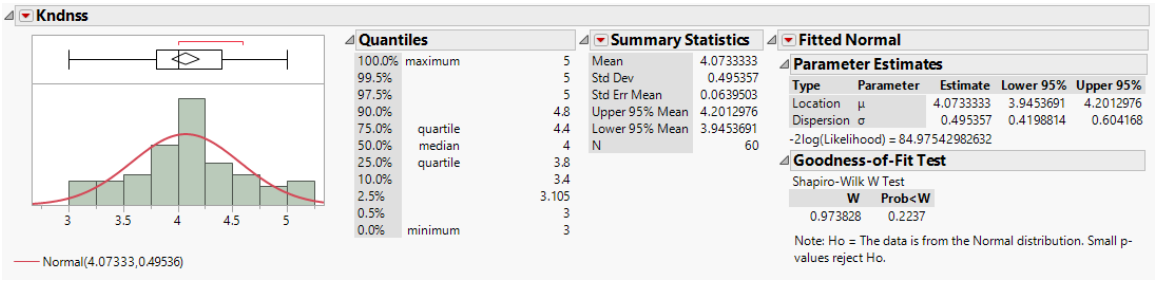


Figure 22, Distribution of Individual Scores for Kindness

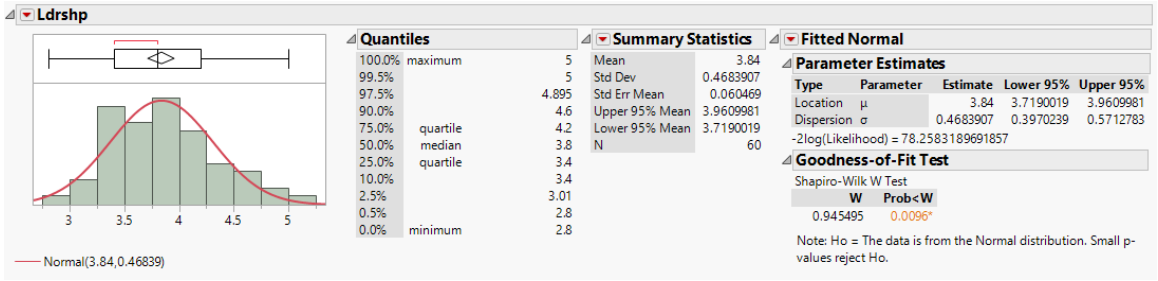


Figure 23, Distribution of Individual Scores for Leadership

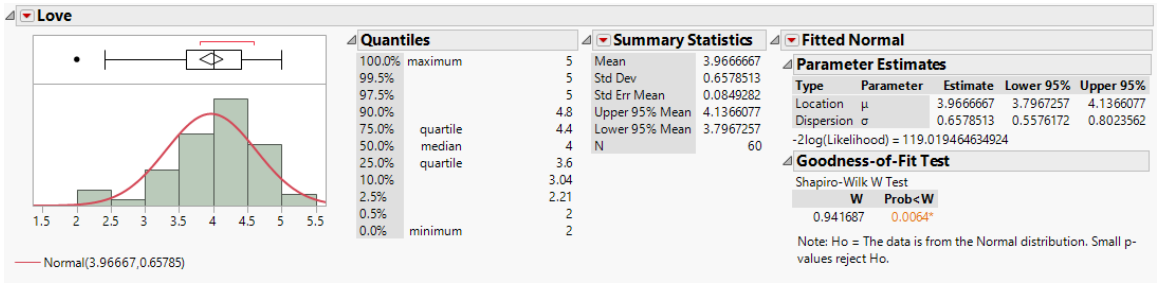


Figure 24, Distribution of Individual Scores for Love

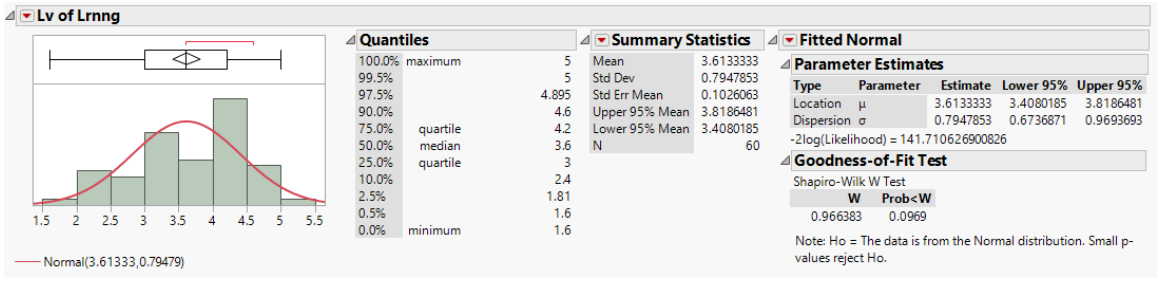


Figure 25, Distribution of Individual Scores for Love of Learning

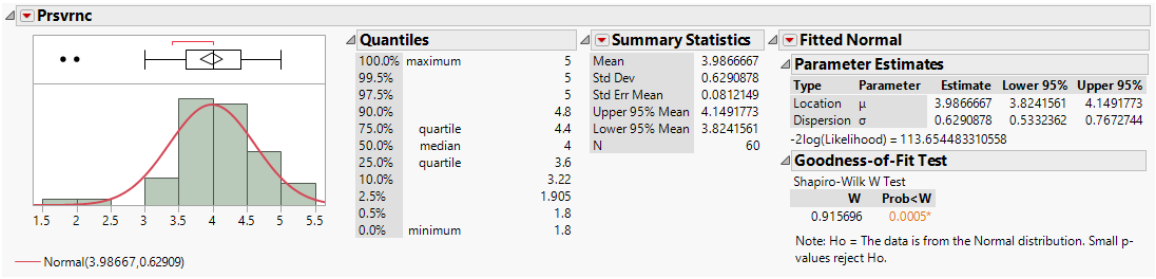


Figure 26, Distribution of Individual Scores for Perseverance

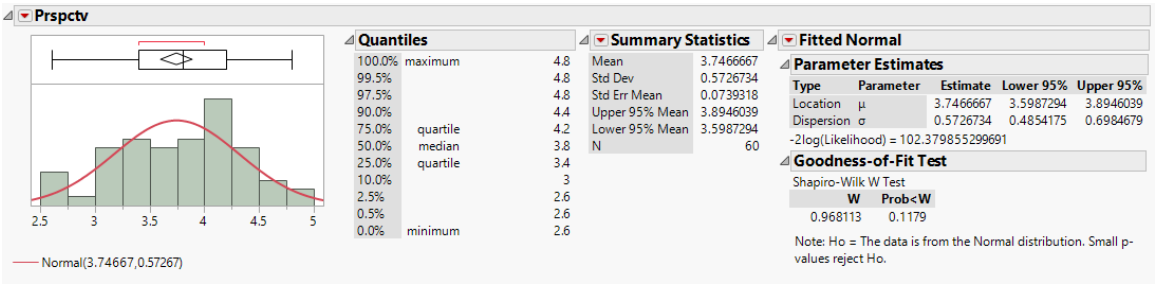


Figure 27, Distribution of Individual Scores for Perspective

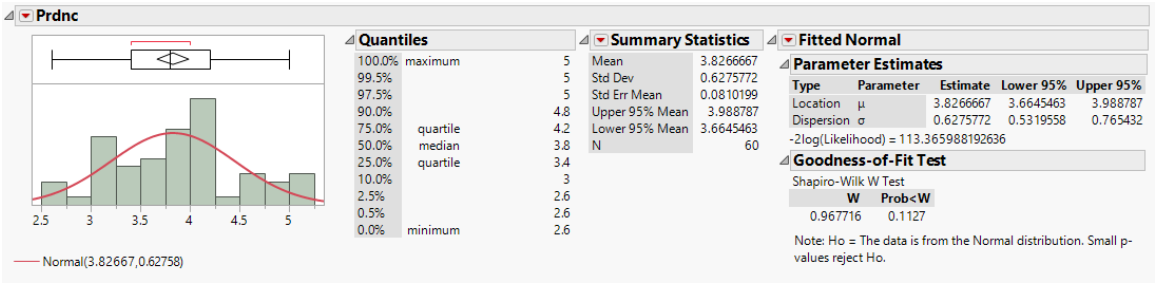


Figure 28, Distribution of Individual Scores for Prudence

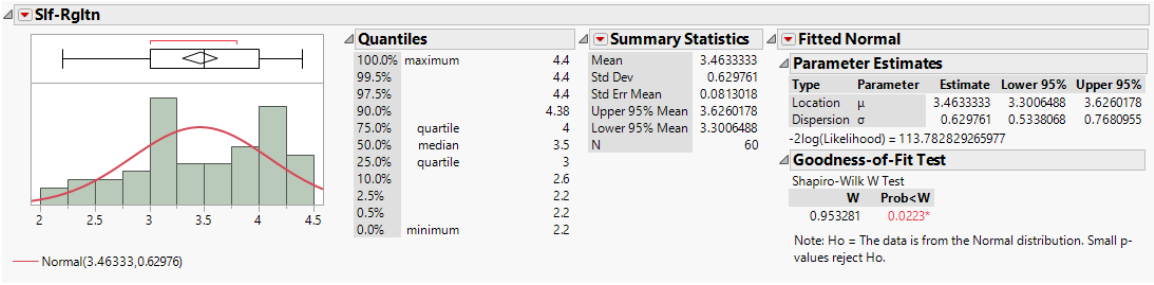


Figure 29, Distribution of Individual Scores for Self-Regulation

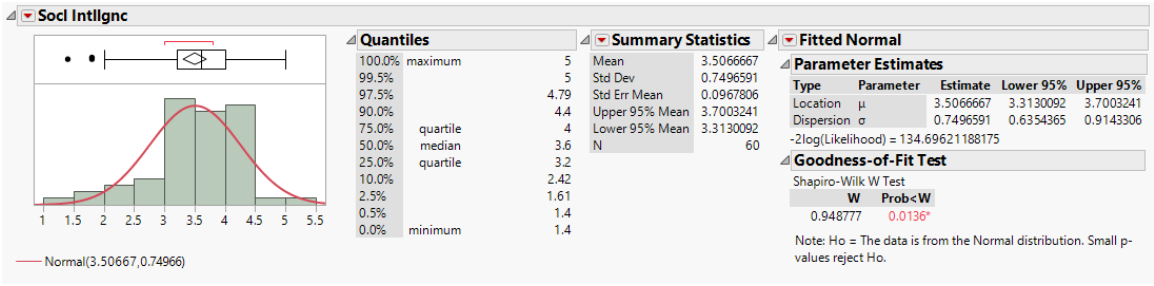


Figure 30, Distribution of Individual Scores for Social Intelligence

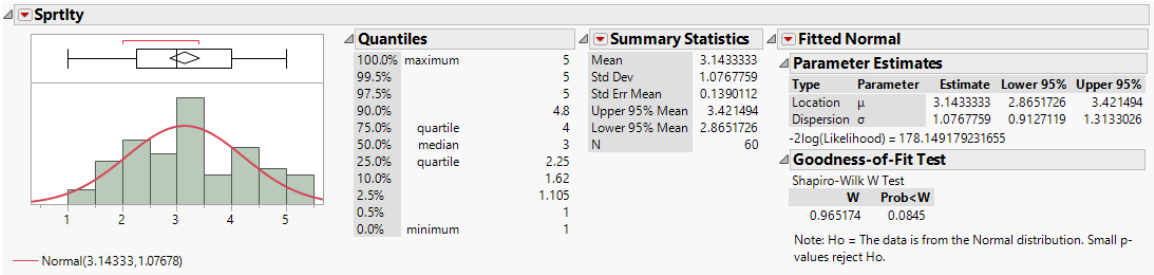


Figure 31, Distribution of Individual Scores for Spirituality

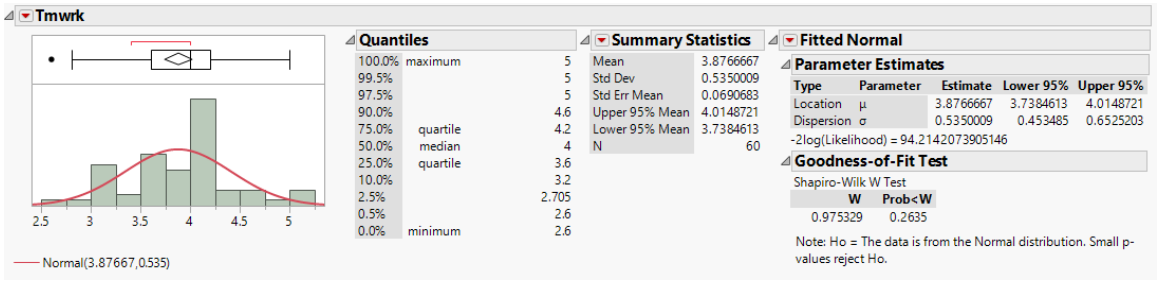


Figure 32, Distribution of Individual Scores for Teamwork

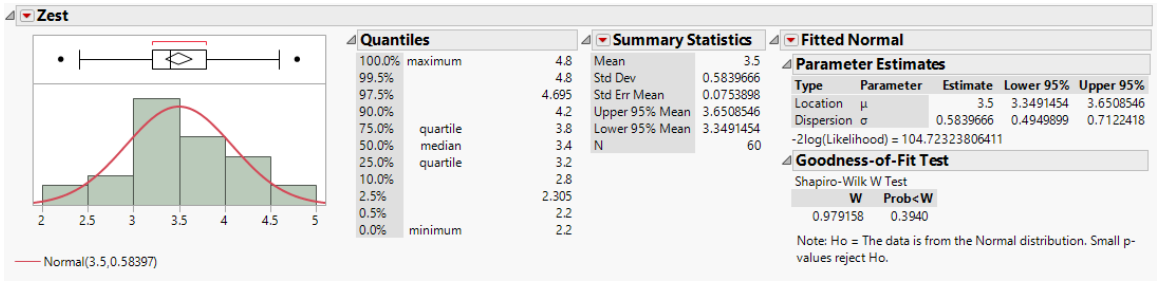


Figure 33, Distribution of Individual Scores for Zest

Bibliography

Air University. *Air Force Survey Program* (AU Supplement). AFI 38-501. Maxwell AFB, AL: Air University, February 20, 2014.

Aristotle. *Nicomachean Ethics*. (W.D. Ross and J.O. Urmson, Trans.). In *The Complete Works of Aristotle*. Ed. J. Barnes. Princeton, New Jersey: Princeton University Press, 1995.

---. *Politics*. (B. Jowett, Trans.). In *The Complete Works of Aristotle*. Ed. J. Barnes. Princeton, New Jersey: Princeton University Press, 1995.

Asalone, S. "Using Strengths Assessments." In *Character Strengths Matter: How to Live a Full Life*. Ed. S. Polly and K. Britton. Positive Psychology News, 2015.

Bertha, C. "Teaching Ethics to Engineers." *Proceedings of the Spring 2006 Middle Atlantic Section*. Washington: American Society for Engineering Education, 2006.

Cain, A. "Books and Becoming Good: Demonstrating Aristotle's Theory of Moral Development in the Act of Reading." *Journal of Moral Education,* 34: 171-183 (June 2005).

Cawley M.J., III, J.E. Martin and J.A. Johnson. "A virtues approach to personality." *Personality and Individual Differences,* 28: 997-1013 (2000).

Consentino, A. C. and A. Castro. "Character strengths: A study of Argentinean soldiers." *Spanish Journal of Psychology*, 15: 199-215 (2012).

Dahlsgaard, K., C. Peterson and M.E.P. Seligman. "Shared virtue: The convergence of valued human strengths across culture and history." *Review of General Psychology,* 9: 203-213 (2005).

Davis, R.L. and F.P. Donnini. *Professional Military Education for Air Force Officers: Comments and Criticisms*. Maxwell AFB, AL: Air University Press, 1991.

Department of the Air Force. *The Little Blue Book* (1st edition). Washington: 1997.

Department of the Air Force. *The Little Blue Book* (2nd edition). Randolph AFB, TX: Profession of Arms Center of Excellence, 2015.

Diagnostic and statistical manual of mental disorders (4th edition). Washington: American Psychiatric Association, 1994.

Diener, E., D. Wirtz, W. Tov, C. Kim-Prieto, D. Choi, S. Oishi and R. Biswas-Diener. "New well-being measures: Short scales to assess flourishing and positive and negative feelings." *Social Indicators Research*, 97: 143-156 (2010).

Dierker, G.J. *Core Values: A History of Values-Related Initiatives in the Air Force*. MS Thesis, AGIT/GLM/LAL/97S-1. Graduate School of Logistics and Acquisition Management, Air Force Institute of Technology (AU), Wright-Patterson AFB, OH, September 1997.

Erez, M. and E. Gati. "A dynamic, multi-level model of culture: from the micro level of the individual to the macro level of a global culture." *Applied Psychology: An International Review*, 53: 583-598 (2004).

Geeraerts, D. "The theoretical and descriptive development of lexical semantics." In *The Lexicon in Focus: Competition and Convergence in Current Lexiography*. Ed. L. Behrens and D. Zaefferer. Frankfurt: P. Lang, 2002.

Government Accountability Office. *Additional Steps Are Needed to Strengthen DOD's Oversight of Ethics and Professionalism Issues*. GAO-15-711. Washington: Government Printing Office, 2015.

Haidt, J. "The emotional dog and its rational tail: A social intuitionist approach to moral judgment." *Psychological Review,* 108: 814-834 (2001).

---. *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. New York: Random House, 2012.

Heath C. and D. Heath. *Switch: How to Change Things When Change is Hard*. New York: Crown, 2010.

Industrial College of the Armed Forces (ICAF). *Strategic Leadership and Decision Making*. Washington: n.d. Retrieved from http://www.au.af.mil/au/awc/awcgate/ndu/strat-ldr-dm/cont.html.

JMP® Pro 12.0.1. SAS Institute, Inc. See www.jmp.com.

Krawczyk, R.M. "Teaching Ethics: Effect on Moral Development." *Nursing Ethics,* 4: 57-64 (1997).

Lewis, C.S. *The Abolition of Man, or Reflections on education with special reference to the teaching of English in the upper forms of school*. San Francisco: HarperCollins, 2001.

MacIntyre, A. *After Virtue: A Study in Moral Theory* (3rd edition). Notre Dame: University of Notre Dame Press, 2007.

Matthews, M.D., J. Eid, D. Kelly, J.K.S. Bailey and C. Peterson. "Character strengths and virtues of developing military leaders: An international comparison." *Military Psychology*, 18(Suppl.): S57–S68 (2006).

Mayerson, N.H. Foreword. In *Character Strengths Matter: How to Live a Full Life*. Ed. S. Polly and K. Britton. Positive Psychology News, 2015.

McClave, J.T., P.G. Benson and T. Sincich. *Statistics for Business and Economics* (12th edition). Boston: Pearson, 2014.

McGrath, R. E. "Scale- and item-level factor analysis of the VIA Inventory of Strengths." *Assessment* (1 August 2012). DOI: 10.1177/1073191112450612.

Morgan, D.L. "Practical Strategies for Combining Qualitative and Quantitative Methods: Applications to Health Research." *Qualitative Health Research*, 8: 362-376 (May 1998).

Morse, J. "Approaches to Qualitative-Quantitative Methodological Triangulation." *Nursing Research*, 40: 120-123 (March 1991).

Office of the Senior Advisor to the Secretary of Defense for Military Professionalism. *Report to Congress: Preliminary Review of the Effectiveness of Professionalism Programs and Controls across the Department of Defense*. DoD ReflD: 4-03CA6EF. Washington: Department of Defense, 2015.

Olsthoorn, P. "Virtue Ethics in the Military." In *The Handbook of Virtue Ethics*. Ed. Stan van Hooft. Acumen, 2013.

Pavela, G. "Fifteen Principles for the Design of College Ethical Development Programs." *Proceedings of the Academic Integrity Seminar*. Academic Integrity Seminar, 2015.

Peterson, C. and N. Park. "Classifying and measuring strengths of character." In *Oxford handbook of positive psychology* (2nd edition). Ed. S. J. Lopez and C.R. Snyder. New York: Oxford University Press, 2009.

Peterson, C. and M.E.P. Seligman. *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association, 2004.

Polly, S. and K. Britton (Eds.). *Character Strengths Matter: How to Live a Full Life*. Positive Psychology News, 2015.

Price, J.F., Jr. *Moral Competence for the Joint Warfighter: The Missing Element in Defense Transformation*. MS Paper. Joint Forces Staff College, Joint Advanced Warfighting School, Norfolk, VA, June 2006.

Rakhilina, E. and T. Reznikova. “Doing Lexical Typology with Frames and Semantic Maps.” National Research University Higher School of Economics, 2014.

Robinson, P. “Ethics Training and Development in the Military.” *Parameters*, 23-26 (Spring 2007).

Seligman, M.E.P. *Flourish: A Visionary New Understanding of Happiness and Well-being*. New York: Free Press, 2011.

Schein, E. *Organizational Culture and Leadership: A Dynamic View?* (3rd edition). San Francisco: John Wiley & Sons, Inc., 2004.

Schwartz, B. and K.E. Sharpe. “Practical Wisdom: Aristotle meets Positive Psychology.” *Journal of Happiness Studies*, 7: 377-395 (Sep 2006).

Smith, J.M. “Air Force culture and cohesion.” *Airpower Journal,* 12: 40-53 (Fall 1998).

Stanfield, D.L. *Breaking Bad: The Efficacy of Ethics Education in Air Force Officer PME*. Research report, Air War College (AU), Maxwell AFB, AL, February 2015.

Sweeney, P., S.T. Hannah, N. Park, C. Peterson, M. Matthews and D. Brazil. “Character strengths, adaptation, and trust.” *Proceedings of the International Positive Psychology Association Conference*. International Positive Psychology Association, June 19, 2009.

Toner, J.H. “Mistakes in Teaching Ethics.” *Airpower Journal* (Summer 1998). Maxwell AFB, AL.

Vroom, C. and R. von Solms. “Toward information security behavioural compliance.” *Computers & Security*, 23: 191-198 (2004).

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14. ABSTRACT

The purpose of this study is to operationalize the Air Force Core Values using the tools of positive psychology. Although the Air Force has adopted certain tenets of positive psychology into its resilience training, little research has been done to apply its insights to Air Force ethics. To fill this gap, the study used a qualitative preliminary research design, in which an initial qualitative phase of research guided the data collection and analysis in a quantitative phase. The first objective was to determine the relationship of the Core Values to the VIA Classification of Character Strengths. Phase 1 used lexical semantics to identify strong relationships between four Air Force virtues and VIA character strengths, as well as five weaker relationships. This mapping makes it possible to use the VIA Inventory of Strengths to see how well the Air Force imparts its Core Values to Airmen. The second objective was to demonstrate how the VIA Inventory might be used in an Air Force environment. Phase 2 administered the VIA Inventory to Airmen at the Air Force Institute of Technology and analyzed the results using standard statistical techniques. This identified several variables of interest for future longitudinal studies.

15. SUBJECT TERMS

Core Values, Positive Psychology, Virtue Ethics, Professional Military Education

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